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Assessing the essential pre-conditions of an authentic sustainability curriculum

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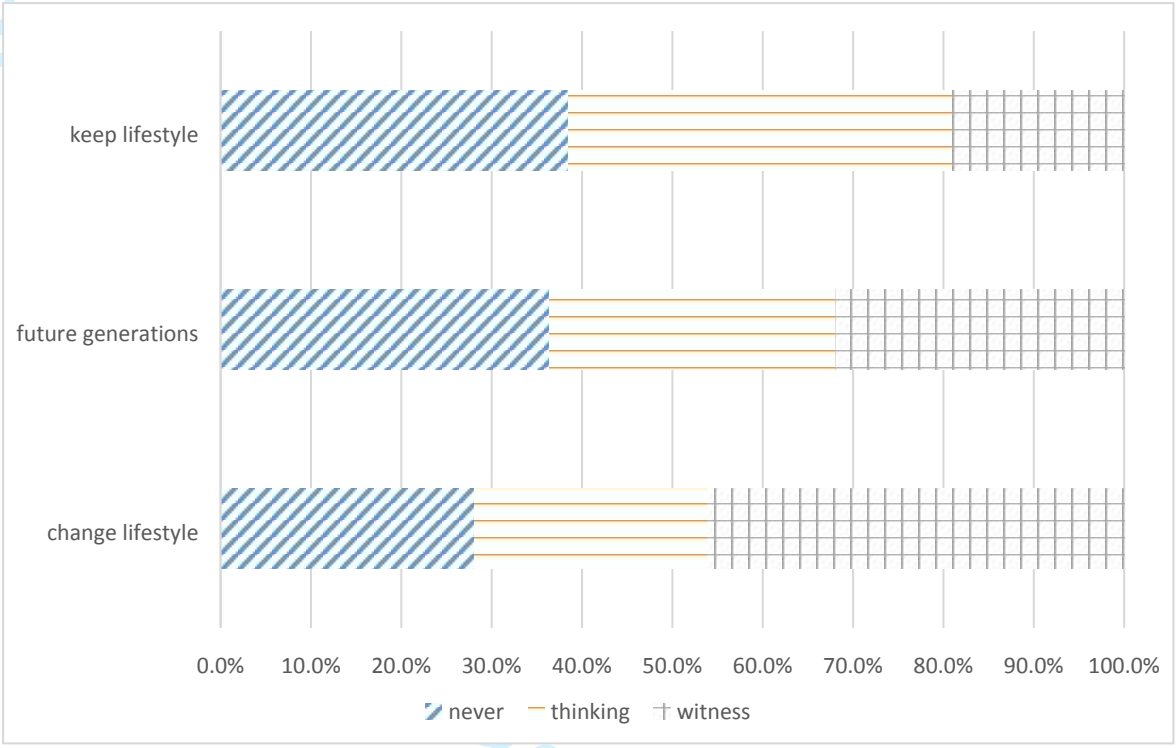

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Questions	Main categories	Sub-categories	Anchor samples (meaning units)
Q1 (mindfulness)	Witnessing	Knows mindfulness	"Yes, I regularly do meditation. Putting it briefly, for me complete relaxation is when I am not busy with past or future but live in the present."
		Doesn't know mindfulness	Sometimes it happens that I just sit on my bed in the morning, think about nothing just look and listen. I rarely reach complete emptiness, but when I do it feels very good."
	Thinking	Past events	"It rarely happens, but when it does, I mostly think about whether I made the right decisions."
		Future events	"It feels good to just stare and think about the future sometimes."
		Solve problems	"If too many thoughts are flashing through my mind, I sometimes sit down, look ahead and try to find a solution to my problems."
		Other	"It feels good to philosophize about the world sometimes and do nothing else."
	Never	Lack of time	"I don't have time for such things. I work till I drop in bed."
		Other	"I never do that. It's a waste of time."
Q2 (sustainability)	Change consumer lifestyle	Consume green	"Conscious shopping, minimal packaging, recycling."
		Consume less	"Restricting consumption and satisfying only basic needs."
		Save natural environment	"Saving natural values and respecting the carrying capacity of the planet."
	Keep consumer lifestyle	Standard of living	"Being able to keep up the present standard of living."
		Financial security	"Financial stability to keep our lifestyle."
		Other	"Balance of loss and profit."
	Future generations	Liveable planet	"Sustaining a liveable planet for future generations."
		Future needs	"Consider the needs of future generations."
	Other		"Something that doesn't collapse." "Financing costs." "Useful Activity." "Unrealizable ideal, empty words, avoiding responsibility."

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Q3 (economic growth)	Concerned	Overpopulation	"Global population grows too fast."
		Growing inequality	"Uneven distribution of goods. Some are getting rich but the majority can't get ahead."
		Harm to natural environment	"Destruction of nature."
	Not concerned	Growing income	"Higher income, higher standard of living."
		Growing consumption	"People buy more and more goods."
		Growing employment	"Creation of job opportunities and strengthening of the country."
		Growing GDP	"Higher GDP which includes better infrastructure. It is moving forward."
		Growing profit	"Profit of companies grows. Healthy capitalism."
		Economic development	"Improvement of the economic situation."
	Other		"Not Hungary. The government is simply lying." "Longer working hours." "Wages do not grow along with prices."
Q4 (community building)	3pillars		"Ecologically sustainable farming, constant learning, sustainable population, keeping faith and traditions and living in peace with nature."
	Economic		"Economically speaking self-sufficient, goods would be exchanged in a barter system."
	Environmental		"To me the ideal community is based on the Russeauian slogan 'Back to nature'".
	Social		"I would live together with people who are generous, altruistic, honest and diligent."
	Socioeconomic		"It would be organized in a democratic way. It would produce its own food, so it would be self-sufficient, no money used for food."
	Impossible		"There's no such thing as the ideal community. History has shown many times."
Q5 (manipulation)	Agree		"I agree."
	Disagree		"I disagree"
	Other		"It depends."

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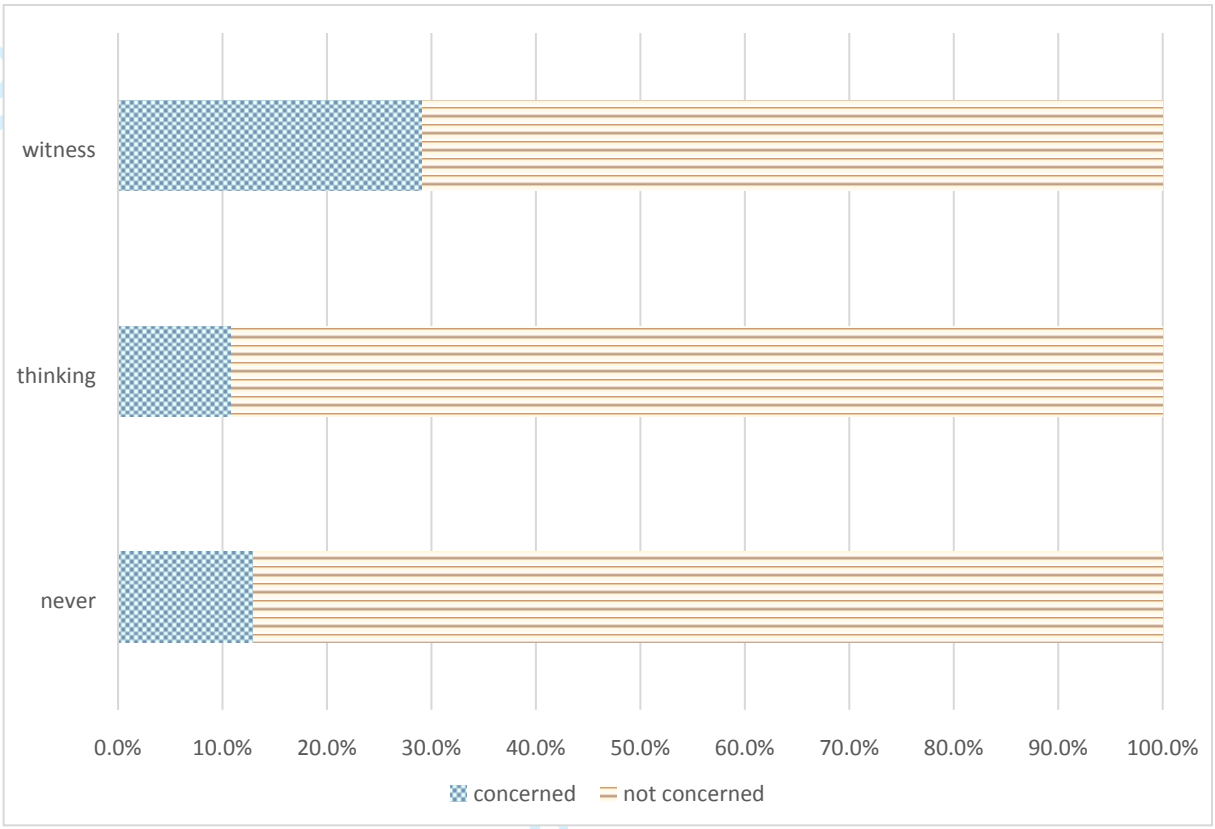

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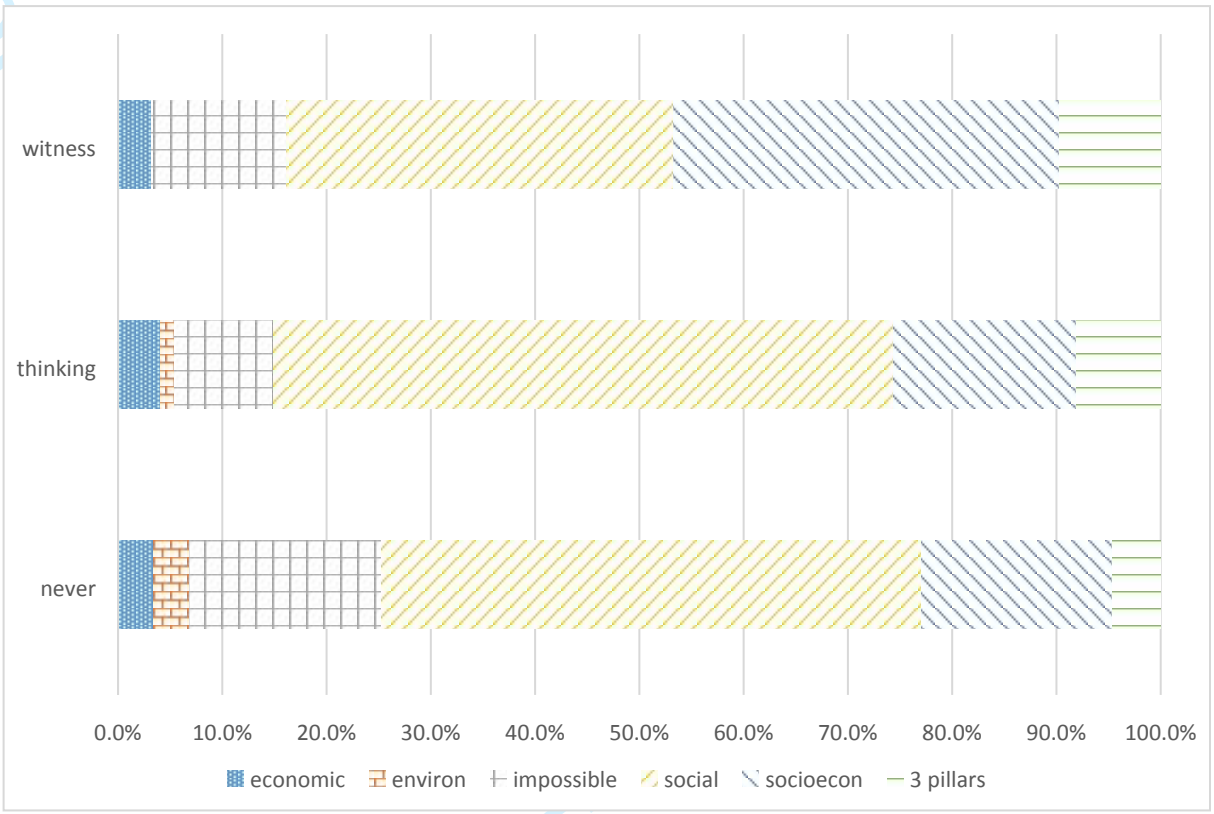

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Assessing the essential pre-conditions of an authentic sustainability curriculum

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Abstract:

Purpose

This study has two aims. The theoretical aim is to analyse three essential pre-conditions of an Authentic Sustainability Curriculum (ASC). The theoretical analysis involves the definition of authenticity through the learning outcomes (LOs) framework called Authentic Minimum (AM). The empirical aim is to gauge students' views on economic growth, sustainability and mindfulness.

Design/methodology/approach

The theoretical aim was accomplished by extensive study of and critical reflections on the relevant literature. The empirical research was qualitative using an online questionnaire as survey instrument consisting of predominantly open-ended questions involving students of two economic faculties. Directed content analysis and nonparametric quantitative methods were used to assess the answers.

Findings

Viable sustainability goals are in stark contrast with the promotion of sustainable economic growth in SDG 8 and the reigning neoliberal agenda. The empirical findings provide valuable insights into how undergraduate students view mindfulness, economic growth and aspects of sustainability.

Originality/value

On the theoretical side, the concept of ASC was introduced with AM as its LOs framework. For the first time, an attempt was made to interpret authenticity in sustainability education as an integration of mindfulness, human and environmental ethics and a firm opposition to economic growth and neoliberal ideals. The analysis of qualitative data supported earlier research and also provided unique findings in the examined areas.

Keywords: sustainability education, economic growth, neoliberal ideals, authenticity in higher education, mindfulness in higher education, ethics-based higher education

Introduction

In higher education (hereafter HE) literature the adjective "authentic" occurs in various contexts including knowledge construction and academic performance (Newmann et al., 1996), assessment (Bosco and Ferns 2014), teaching science (Braund and Reiss 2006), students' scientific inquiry (Hume and Coll 2010) or problem based learning (PBL) (Dobson et al., 2012), to mention a few, and typically describes correspondence approaches (Splitter 2009) where students are confronted with tasks resembling real life situations. The authentic character of the teacher and students has also been subject of enquiry (Cranton 2001, Laursen 2005, Chickering 2006, Kreber 2013b, Bialystok 2015). According to Kreber authentically engaging in the Science of Teaching and Learning (SoTL) "… *means to act in the important interests of students by helping them grow into their own authenticity*". She views authenticity of a person as something necessarily encompassing qualities such as responsibility, compassion,

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reciprocity, placing public good above self-interest and acting ethically (Kreber 2013a). Several authors reflected on the authentic character of teachers underlining the importance of being a role model for students (Dawe, Jucker, Martin, 2005, Lovren 2017, Shephard 2008, Cavallaro, Boucher, Steelman 2017).

Authenticity is the overarching theme of the present paper. It is one of the most challenging, intriguing and contested concepts that has emerged in social sciences. Interpreting it as an existential term, encompassing aspects of how we should relate to ourselves, others and the world around us, it becomes apparent that even if only implicitly, it has always been in the focus of Western (Kernis, Goldman 2006, Bialystok 2009, Varga 2013, Adorno 2013) as well as Buddhist philosophy (Zimmerman 1993, Harvey 2000, De Silva 2016). The present research will draw heavily on the latter (Williams, Kabat-Zinn 2011, Wright 2017).

In contrast to earlier conceptions of how we should exist in the world (authenticity), found in Heracleitus, Socrates, Nagarjuna, Augustine, Eckhart or Taylor where knowledge of the self (e.g. Know thyself) meant transcending the individual or personal level and realizing how one is part of an interconnected web of cosmic whole, with all the moral consequences of such a realization, modernity has deformed the concept into an ultimately individualistic ideal of self-determining freedom and soft relativism (Taylor 1992), self-indulgence (Varga 2013), self-congratulating complacency (Guignon 2008) and a search for unique personal traits and self-expression, thus widening the already huge divide between humans and humans as well as humans and nature (Taylor 1992, Rapley 2004, Denzin, Lincoln 2011, Bakari 2014). The increasingly individualistic nature of (post)modernity and its pathologic consequences of moral relativism and excessive hedonism have been criticized by many (Taylor 1992, Bodhi 1994, Simpson 2001, De Geus 2004, Bloom 2008, Black, Shaw, Trebeck 2017). The present paper attempts to provide an interpretation of the word "authentic" in the context of pressing sustainability issues and curriculum development to teach sustainability in HE. In this interpretation authenticity characterises a mindfulness and a natural and human ethics based normative and transformational approach to teaching, curriculum development and learning outcomes (hereafter LOs) framework. Environmental ethics and moral principles governing relations with others cannot be separated in a truly systemic approach (Taylor 1981, Nash 1989, Naess, Drengson 2008, De Silva 2016, James 2017).

While there is a myriad of factors and conditions having an impact on the success of an authentic sustainability curriculum (hereafter ASC), this paper aims to focus on three pre-conditions which the authors consider the cornerstones of an ASC:

1. Acknowledging and emphasizing the primary importance of meditative mindfulness
2. Acknowledging and emphasizing the impossibility of limitless economic growth
3. Acknowledging and emphasizing the impossibility of reconciling ideals of neoliberal capitalism and consumerism with human and environmental justice.

Why these three points?

The consumer paradigm is built on the dark aspects of human nature such as greed, possessiveness, selfishness, vanity, cut-throat competitiveness, moral relativism (Fromm, 2013). As these emotional forces are largely driven by the subconscious, once unleashed, the individual is a perfect target of the manipulative forces of agressive advertising of commodities or ideologies. By the time a graduate leaves the neoliberal HEI these ideologies might already have become the Scheinian "*shared assumptions*" that operate "*outside of awareness*" (Schein, 2012, p. 12). High levels of mindfulness (reached through mindfulness practice) create an opportunity to realize how the self becomes identified (Grabovac, Lau, Willett 2011) with cravings, desires, emotions, beliefs, compulsions and inner forcess that need to be harnessed to be able to steer the consumer towards ever-increasing levels of consumption. This realization

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brings about the possibility of detachement which in turn can lead to inner transformation and a new realisation of what one's true/authentic self is (Bodhi, 2011).

Growth and ethics-related issues, which are strongly connected to neoliberal ideals (Nelson 2014, Schmelzer 2015), are so fundamental to sustainability and its integration into the curricula of a higher education institution (hereafter HEI) that a clear and firm stance is crucial.

The problem of growth

Peer-reviewed articles promoting the implementation of SDGs (Sustainable Development Goals) through ESD (Education for Sustainable Development) in higher education offer a lot of valuable ideas (e.g. problem-based learning, community service-learning, participatory action-research) worth being integrated into an ASC. Strangely, however, they fail to critically reflect on SDGs, especially SDG 8 which promotes "sustained, inclusive and sustainable economic growth" (UN 2018). Constant economic growth still forms the basis of neoliberal capitalism. Washington and Kopnina are quite explicit about it, "*The insanity and unsustainability of endless economic growth is a critical reality that society must acknowledge and discuss.*" (Washington and Kopnina, 2018, p. 62). Since "Limits to growth" was published (Meadows et al., 1972) and even before it (Carson, 1962; Hardin, 1968) many researchers and scientists have tried to call humanity's attention to the unviability of limitless growth (Capra, 1983; Costanza and Daly 1987; Scitovsky 1992; Brown et al., 2011; Meadows and Randers 2012; Dietz, O'Neill 2013; Eriksen and Schober 2018; Ardichvili 2012). There is scientific consensus on this issue today (Kendall 2000, Ripple et al., 2017). All that said, it is hard to believe that in Goal 8 of the UN's set of SDGs "*sustainable economic growth*", that is, business as usual (hereafter BAU) is promoted (UN, 2018).

The very notion of sustainable development was created as a contrast to traditional development based on economic growth (Pawłowski, 2008). In a normative, ethics-based authenticity framework constant economic growth is unethical (Patz et al. 2007, Zsolnai 2011, Piff et al. 2012, Fotaki, Prasad 2015). As there is scientific consensus on the most imminent threats to our life support systems it is a moral responsibility (Cortese 2003) of HEIs to impart knowledge and develop competencies which are necessary to change our present consumer paradigm.

The problem of neoliberal ideals

There have been a lot of critical voices in connection with neoliberalism's impact on HE in recent years (Giroux, H. A. and Giroux, S. S. 2004, 2009; Saunders, 2010; Washburn, 2008; Taylor, 2017; Cannella and Koro-Ljungberg 2017; Webb, 2018). Huckle and Wals warns, "*Educational institutions have largely given up 'training people capable of thinking about important political, environmental, economic and social issues of global order' and reflecting and acting on radical alternatives*." (Huckle, Wals 2015, p. 493). Comparing neoliberal and public education in the US Baltodano remarks "… *neoliberalism is training students to become docile citizens*." (Baltodano, 2012, p. 490). An ASC should be able to answer questions *"on how education should be used as a transformational mechanism to improve lives rather than a tool to train and inculcate people to imitate and be subservient to the dominant culture. (*Tienken, 2013, p. 296). The question arises: How will the manipulable, pro-capitalist graduates solve the problem of overconsumption, climate change or the crippling aspect of the neoliberal world order, the enormous inequality in wealth distribution termed by Torres (2015, p 276) "*a divisive and insidious malady that consistently undermines all possibility of true social*

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cohesion."? Today's increasingly commoditized, corporatized HEIs serving the student-customers by transforming them into a competitive product, a homo economicus on the globalized market, provide, lower rather than higher education.

Sustainability should primarily mean the re-establishment of the relationship between humans and humans and humans and nature based on universal ethical principles (Taylor 1992, Cortese 2003, Corcoran, Wals 2004). The anthropocentric, postmodern interpretation of nature devoid of intrinsic value and meaning (Crist, 2004) further assists in its colonization (Blenkinsop et al. 2017). While one might argue, from a social constructivist stance, that values are culturally constructed, context-dependent and relative, not all values are unique to a particular culture, there are universal ones (Schwartz and Boehnke, 2004). Nature is a brilliant teacher with a "curriculum" (De Moore in Gadotti 2010) that teaches universal ethics for survival. Not the seemingly universal "ethics" of social Darwinism, proposed by Spencer and in the past decades "repackaged" by neoliberalism (Leyva, 2009), which seriously understates the role of cooperation and altruism and overstates the importance of competition (Rigney, 2001). One of the most important attributes of an ASC is that it should instruct students to learn to be instructed by nature. As Bonnett (2009, p. 48) puts it "… *a need for a mental re-orientation … a need spiritually to prepare ourselves for the reception of knowledge through a suspension of the currently prevalent motive for mastery*." Our attitude to and relationship with nature is a key component of any viable interpretation of sustainability and authenticity. Being the biggest integrating system in the nested systems hierarchy of sustainability, only nature can teach us how to live sustainably. It teaches interconnectedness, acceptance, moderation, compassion and cooperation (Rand et al., 2014, Davidson et al., (2002) to mention five survival values which are not championed by consumer societies and neoliberal capitalism.

Theoretical and methodological underpinnings of a LOs framework for ASC

Emancipation, instrumentalism and transformation

While some scholars like Wals (2010) emphasize pluralism-based learning where there are no privileged views, others including Kopnina strongly criticize these emancipatory methods pointing out that they lead to "… *endless circles of discussion, contestation, and negotiation without specified ends*." (Kopnina 2015, p. 311). Evidently, instrumental approaches can be time-effective while pluralistic approaches entail a more extended timeframe to be successful. The "emergency/threat level" of a particular situation very much determines whether bottom-up or top-down approaches might be more effective. If we accept that our situation is indeed a serious emergency, the adjective "tempting" can be replaced by "logical" in the warning by Wals', "… *the deeper the planetary sustainability crisis, the more tempting it is to adopt more instrumental approaches because people come to think that we are running out of time and need to act now*." (Wals, 2011, p. 178). Time is running out indeed (Orr 1998, Rees 1999, Jickling, Sterling 2017) and we do have to act now.

In connection with the most criticized form of instrumentalism, indoctrination, there is a lot of hypocrisy and vagueness in neoliberal educational theory (Saunders 2007, Kopnina 2014). In his critical writing about liberal and therapeutical education's attitude to indoctrination Hábl aptly points out that "… *it is possible to indoctrinate to the truth, but also to the opposite: it is possible, with very good and honest didactics, to lead someone into error*." (Hábl 2017, p. 190). Re-learning survival values, given the time pressure underlined by the majority of the scientific community, will inevitably have to include prescriptive content and aims or instrumental and authoritarian methods. Authority, however should emanate from the spiritual authenticity of the teacher, not from the power of his position within the HE hierarchy (Stoesz, 1978, Zuck 2002). Spirituality is taken to mean mindfulness, inner growth, expansion

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of the self and an increasing sense of interconnectedness (Chickering 2006, Carroll 2001, Gardner, Gabriel, Hochschild 2002, Bai, Scutt 2009, Teasdale 2010, Chang, Boyd 2016, Lazaridou, Pentaris 2016, Lengyel 2018).

The ASC has to be emancipatory. It has to enhance autonomy and freedom. However, in an ASC these principles, also championed by neoliberal education, are interpreted differently for the most part (Radford 2012, Vassallo 2013). Emancipatus in Latin meant "set free from control". In meditative traditions like Buddhism the ultimate liberation is enlightenment which means that through the practice of meditation one is freed from the deterministic control of karmic forces, mental hindrances such as greed, lust, anger, hatred, envy, possessiveness, doubt, anxiety, violence, dullness, arrogance or the illusion of being separate (Hanh 2002). These are the forces that provide the unconscious basis of our consumer mentality.

Transformation, similarly to authenticity, is an extensively researched and contested notion in the context of education in general and HE in particular (Sipos et al. 2008, Granados, Wals 2011, Wright et al. 2015, Dirkx, Espinoza 2017, Mezirow 2018, Jagannathan, Camasso, Delacalle 2018). In his explanation of social learning Wals (2011, p. 181) emphasizes that "… *the creation of a more sustainable world requires learning; not just any learning, but learning that leads to a new kind of thinking, alternative values and co-created, creative solutions,…*". Embracing a different world-view, a different value system and acting (creating) on this new basis of values is what the authors consider actualized transformation. Developing an ASC entails that it will result in LOs that involve transformation of world views followed by a transformation of lifestyle (Swanström et al. 2008). In their highly relevant paper Sipos et al. (2008, p. 74) point to the importance of empirically testing "*... whether sustainability has been learned, is believed, and/or is practiced in participants' lives, that is, whether and how transformation occurs*."

Transformation in an ASC is, above all, an ethical issue. The ethical aspects of transformation are highlighted in a recent overview of the roles that transformation plays in higher education by Filho et al. (2018). They refer to Biedenweg, Monroe and Oxarart whose statement is highly relevant for an ASC, "A potentially critical component to sustainability education, therefore, is an ethical foundation …" (Biedenweg, Monroe, Oxarart 2013, p. 12). Transformation in an ASC is an ethics-oriented process that embraces the Taylorian moral ideal of authenticity in which „*authenticity can't be defended in ways that collapse horizons of significance*." (Taylor 1992, p. 38).

Authentic minimum

Given the normative-ethical nature of sustainability and the fact that students enter HE having been socialized as customers and (over)consumers, an ASC inevitably has to be transformative (Wright et al., 2015) aiming to empower students to have an authentic, that is, a spirituality and not consumption-based existence. This authentic existence is characterised by a set of requirements, horizons of significance (Taylor 1992), called the authentic minimum (hereafter AM). According to the AM an authentic individual or an authentic change agent:

AM1 realizes and internalizes that mindfulness is the basis of transformation and tries to be fully aware and present all the time to avoid being automatically driven and manipulated by her/his own subconscious forces and the consumer machinery.

AM2 realizes and acts according to the realization that nature, living creatures including her/him and other humans are constituents of a magnificently interwoven whole whose elements carry intrinsic value beyond utalitarian and instrumental considerations.

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AM3 becoming aware of the interconnectedness of all elements of existence she/he turns to herself/himself, other humans and all living creatures with humility, respect and compassion.

AM4 understands growth as being primarily inner growth and understands richness as spiritual and cultural enrichment of herself/himself and the community through creative activity and as a result of this realization doesn't want to take more from nature than its carrying capacity can allow.

AM5 understands and internalizes that in the relationship between humans and nature as well as in the relationship between humans and humans there are universal values, clear-cut boundaries (binaries), clear-cut rules that are non-negotiable and should not be opened up to relativistic pluralism.

The above goals of an authentic curriculum should obviously exclude the promotion of an "*ecologically myopic*" (Gill 1995, p.399), "*consumerist*" (Giroux 2002, p. 456) and "*social-Darwinian*" (McGuigan 2016, p. 133) world view. These five points reflect the views of wisdom traditions that have existed for thousands of years (Coe 2000, Bodhi 2010, Zajonc 2013, Hyland 2015). They are the paraphrases, syntheses and adaptations of the teachings of Buddhism and Christianity. Both Buddha and Jesus were embodiments of their teachings, they lived what they preached.

Mindfulness: ontological and epistemological foundation of transformation

Integration of mindfulness into HE was suggested by Shapiro, Brown and Astin (2008) and it was described by Robinson (2004) and Barner and Barner (2011) as an invaluable tool of transformational learning. Regardless of whether transformation is cognition-driven (Mezirow 2018) emotion-driven (Dirkx, Espinoza 2017) or holistic (Jagannathan, Camasso, Delacalle 2018) receptivity and openness on the part of the learner are pre-conditions of transformation. Meditative mindfulness as a state of consciousness is characterised, among other things, by a high level of receptivity and openness (Bishop et al. 2004). Mezirow (2006) posited that transformation is triggered by an epochal event or disorienting dilemma (e.g. loss of somebody, loss of job, an accident) thus change is a sudden occurrence. Although, in educational settings, this kind of naturally occurring abrupt change cannot be the basis of transformational learning and teaching (Daloz 2000, Barner, Barner 2011), cathartic meditation techniques (Saxena et al. 2013, Iqbal, Singh, Aleem 2016, Bansal, Mittal, Seth 2016), especially cathartic breathing techniques (Holmes et al. 1996, Wolf 2009, Eyerman 2013) can "simulate" the disorienting event required in the Mezirowian transformational paradigm and serve as an accelerator in the otherwise gradual transformational process. Cathartic techniques can be integrated with traditional mindfulness techniques (Osho 2004, Chobe, Joshi 2016). An ASC should aim to transform the student consumer into an autonomous, emancipated and mindful human being capable of living a life based on predominantly eudemonic values (Ryan, Deci 2000, Deci, Ryan 2008, Ryan, Curren, Deci 2013) and human ethics intimately entwined with environmental ethics. Such transformation might sound unviably radical as an educational aim, however, the rising level of threat posed by crossing planetary boundaries (Rockström et al. 2009, Steffen et al. 2015) and the fast-decreasing time to take meaningful action (Ripple et al., 2017) call for radical measures (Temper et al. 2018).

Mindfulness has been tested on college and university samples in randomized controlled trials (Oman et al. 2008, Chen et al. 2013, Galante et al. 2018, Lynch et al. 2018) and also by

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qualitative tools (Schwind et al. 2017) in HE settings. Mindfulness is now integrated in courses and programs of many institutions where „first person" approaches are promoted (Holland 2006, Bush 2011, de Bruin, Meppelink, Bögels 2015). Mindfulness meditations are tools of self-discovery (Wamsler et al., 2017; Amel et al., 2009; Brown and Ryan 2003; Brown et al., 2007; Fischer et al., 2017, Barrett et al., 2016), their application does not require any formal religious affiliation. Mindfulness is a "unique path to transformational learning" (Barner and Barner, 2011, p. 2). It results in positive changes such as improved attention and emotional control (Tang, Hölzel, Posner 2015, de Bruin et al. 2016), reduced ego-defensiveness (Neff, McGehee 2010) and verbal deffensiveness (Lakey et al. 2008), decreased experiential avoidance (Alda et al. 2016), less automatic information filtering (Brown, Ryan, Creswell 2007), non-judgemental attitude (Barcaccia et al. 2019), raised sense of interconnectivity (Unsworth, Palicki, Lustig 2016) decreased ruminative thinking (Royuela-Colomer, Calvete 2016), increased present-centeredness (Brown, Ryan 2003), openness and receptivity (Baer et al. 2006, Brown, Cordon 2009). In addition to having a scientifically proven positive effect on ecologically responsible behaviour and subjective wellbeing (Brown, Kasser 2005, Wamsler 2018), mindfulness also enhances reflexive capacity necessary for true autonomy which in turn is the basis of eudaimonia (Deci, Ryan 2008, Ryan, Curren, Deci 2013).

One of the main shortcomings of assessing the effectiveness of sustainability education is the relative lack of longitudinal research (Brock, Florescu, Teran 2012, Tisdell 2017) that extends testing well beyond graduation into working life. Even if assessments of programs before or on graduation suggest an effectiveness of the methods applied (Pauw et al. 2015, Marshall, Banner, You 2018), the main test of seeming transformation is the immersion into the world of everyday consumption. In contrast to the untested real-life efficiency of transformational methods used and promoted in HE, empirical research has proved that regular mindfulness practice can foster sustainable behaviour (Brown, Kasser, 2005, Jacob, Jovic, Brinkerhoff 2009, Amel, Manning, Scott 2009, Barber, Deale 2014, Barbaro, Pickett 2016, Panno et al. 2017, Wamsler, 2018).

Empirical research

Research arrangements, instrument and goals

The empirical research was conducted in December 2018 with the participation of the economic faculties of two universities, the John von Neumann University in Szolnok, Hungary and the University of Debrecen in Debrecen, Hungary. For time and logistic constraints, a sample of convenience was used (Elo et al. 2014). As a measurement method asynchronous online interview was chosen, delivered through an online questionnaire containing mainly open-ended questions besides the demographic variables of age, gender, course level and form. The five questions were:

Q1. When you are alone at home do you ever sit down relaxed but aware and do nothing just observe what is happening and what is? Inside you (e.g. feelings, thoughts, images) and outside (e.g. noises, smells, images). What do you think about this?
Q2. When you hear the term "sustainability", what does this mean to you?
Q3. What comes to your mind when you hear the term "economic growth"?
Q4. Imagine that together with 2-3 hundred like-minded people you decide to create a community in a rural location. You have the initial financial means and an area that is suitable for agriculture but also includes other natural resources like woods. Suppose that you are free to decide how to build this community. You can make your own rules and

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establish new traditions. What would be your main priorities in building an ideal community?

Q5. "People are easily manipulated." What do you think about this statement?

Testing students' views on certain values incorporated into AM was carried out in an indirect way (King, Bruner 2000) (see the five survey questions above) to avoid social desirability bias (Fisher 1993, Fisher, Katz 2000). Social desirability bias is especially strong when distinct values are involved (Dalton, Ortegren 2011).

As mindfulness is a relatively new phenomenon in Hungary (Lengyel 2017), instead of providing respondents with one of the many technical definitions, a mindful state was described in simple everyday terms. The open-ended follow-up question was necessary to be able to distinguish accounts of truly mindful time from inner dialogues, ruminating or other forms of volitional or habitual thought processes (Raes, Williams 2010, Verplanken, Fisher 2014).

To avoid biasing respondents, in the second open-ended question the term "development" was not used together with sustainability. Besides being a contested term (Power 2004, Cowen, Shenton 2017), it is often conflated with "growth" (Feldman et al. 2016).

The open-ended question about economic growth was expected to illuminate whether students have any concerns about its negative consequences. Somewhat surprisingly, empirical research about students' perception of economic growth is extremely scarce (Kagawa 2007). Our concept in formulating the question was to avoid any form of prompting or biasing the students' associations on economic growth.

Our purpose with the fourth survey item was to see whether students, if given a situation of free choice and responsibility about fundamental issues that affect forming a new community, would come up with priorities related to all three pillars (environment, society economy) of sustainability. As in the previous question, the authors wanted to avoid any prompting or biasing by referring to sustainability, growth or other relevant issues.

Consumerism is built on manipulation (Roberts, 2015), hence it is probably not by chance that manipulation, as a research theme, is a "blind spot" of mainstream economics (Van Tuinen 2011). Mindlessness predisposes us to manipulation by advertising (Rosenberg 2004) aiming to boost ever-increasing levels of consumption. The statement was worded in the third person (Moser, Kalton 2017) to avoid social biasing effects (Fisher, Katz 2000).

The application of asynchronous online interviews provides several benefits over personal interviewing techniques (Lindlof, Taylor 2002, Hamilton, Bowers 2006, Meho 2006, Ratislavová, Ratislav 2014, Golding 2014, Hershberger, Kavanaugh 2017). Before sending out the link to the questionnaire to the students of the two faculties, an approval from the Regional Research Ethics Committee of the University of Debrecen was obtained. Students received the link to the questionnaire through the closed academic information systems (Neptun) of the two faculties. The invitation e-mail provided information about the purpose of the research and its complete anonymity. Respondents had a timeframe of two weeks to complete the questionnaire during which period they were able to stop and continue writing their answers.

The sample

408 questionnaires (John von Neumann University: n=192, University of Debrecen: n=216) were returned by the 5220 students who received the invitation letter. 12 questionnaires lacked so many answers that were excluded from analysis. After the coding process, out of the remaining 396 questionnaires an n=256 subsample was used for quantitative statistical tests.

Demographic makeup of the samples:

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Main sample (n=396): female=49%; male=51%; Mage= 27,81 (Std=9,25); Course level: PhD= 0,3 %; masters=2,3%; bachelor=75,8; higher level vocational=21,6%

Subsample (n=256): female=54,7%; male=45,3%; Mage=28,16 (Std=9,23); Course level: PhD= 0,0 %; masters =9,0%; bachelor=72,7%; higher level vocational=18,3%

In the main sample the aggregate wordcount is 27511 which means an average of 17 words per person per answer. The length range for answers was between 1 word and 207 words per answer. In our study a blended approach of using both qualitative and quantitative methods (Owens, Legere 2015, Hamad et al. 2016) was applied to get a more thorough understanding of students' attitude on the issues in focus. The main sample was the unit of analysis for the qualitative content analysis and the subsample served as the unit of analysis for the quantitative content analysis. Studies in the field of sustainability in HE using content analysis techniques often develop codes in order to carry out quantitative assessment (Dade, Hassenzahl 2013, Deus, Battistelle 2016).

Directed qualitative content analysis

Since our aim was the testing and expanding on existing theory and empirical research in connection with mindfulness, sustainability, economic growth and sustainability-related community building principles and values, directed content analysis (Hsieh, Shannon 2005, Elo, Kyngäs 2008, Assarroudi et al. 2018) was employed to get a picture of how students view and relate to these topics. A modified version of the integrated approach to directed content analysis described by Assaroudi et al. (2018) was employed:

Deductive analysis: 1. Study of existing literature/research, 2. Defining categories and creating categorization matrix, 3. Appointing coders and formulating coding rules, 4. Scanning interviews for overall impression, 5. Pilot coding, 6. Choosing anchor samples for categories, 7. Discussing issues about coding rules and categories 8. Doing the main analysis, 9. Discussing emergent categories 10. Checking inter-coder reliability, 11. Performing quantitative analysis, 12. Correspondence comparison with prior studies, 13. Preparing qualitative and quantitative report

Inductive analysis (Done along with deductive analysis from step 4.): 1. Scanning interviews for overall impression, 2. Open coding of data not categorized under the a priori categories in the categorization matrix, 3. Discussing categories

As the questions were broadly formulated to invite all kinds of associations it was expected that in addition to the pre-determinded deductive categories, new categories and sub-categories might also emerge. They were identified through inductive coding. Table 1. contains the categorization matrix with the pre-determined main categories (marked in red) and also the emergent main categories (marked in blue) and sub-categories. Anchor samples are "concise exemplifications" (Assaroudi et al. 2018) of categories necessary for coders in the coding process. More samples are provided in the discussion part.

Table 1. Categorization matrix

Questions	Main categories	Sub-categories	Anchor samples (meaning units)
Q1 (mindfulness)	Witnessing	Knows mindfulness	"Yes, I regularly do meditation. Putting it briefly, for me complete relaxation is when I am not busy

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			with past or future but live in the present."
		Doesn't know mindfulness	Sometimes it happens that I just sit on my bed in the morning, think about nothing just look and listen. I rarely reach complete emptiness, but when I do it feels very good."
	Thinking	Past events	"It rarely happens, but when it does, I mostly think about whether I made the right decisions."
		Future events	"It feels good to just stare and think about the future sometimes."
		Solve problems	"If too many thoughts are flashing through my mind, I sometimes sit down, look ahead and try to find a solution to my problems."
		Other	"It feels good to philosophize about the world sometimes and do nothing else."
	Never	Lack of time	"I don't have time for such things. I work till I drop in bed."
		Other	"I never do that. It's a waste of time."
Q2 (sustainability)	Change consumer lifestyle	Consume green	"Conscious shopping, minimal packaging, recycling."
		Consume less	"Restricting consumption and satisfying only basic needs."
		Save natural environment	"Saving natural values and respecting the carrying capacity of the planet."
	Keep consumer lifestyle	Standard of living	"Being able to keep up the present standard of living."
		Financial security	"Financial stability to keep our lifestyle."
		Other	"Balance of loss and profit."
	Future generations	Liveable planet	"Sustaining a liveable planet for future generations."
		Future needs	"Consider the needs of future generations."
	Other		"Something that doesn't collapse." "Financing costs." "Useful Activity." "Unrealizable ideal, empty words, avoiding responsibility."
Q3 (economic growth)	Concerned	Overpopulation	"Global population grows too fast."
		Growing inequality	"Uneven distribution of goods. Some are getting rich but the majority can't get ahead."
		Harm to natural	"Destruction of nature."

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		environment	
	Not concerned	Growing income	"Higher income, higher standard of living."
		Growing consumption	"People buy more and more goods."
		Growing employment	"Creation of job opportunities and strengthening of the country."
		Growing GDP	"Higher GDP which includes better infrastructure. It is moving forward."
		Growing profit	"Profit of companies grows. Healthy capitalism."
		Economic development	"Improvement of the economic situation."
	Other		"Not Hungary. The government is simply lying." "Longer working hours." "Wages do not grow along with prices."
Q4 (community building)	3pillars		"Ecologically sustainable farming, constant learning, sustainable population, keeping faith and traditions and living in peace with nature."
	Economic		"Economically speaking self-sufficient, goods would be exchanged in a barter system."
	Environmental		"To me the ideal community is based on the Russeauian slogan 'Back to nature'".
	Social		"I would live together with people who are generous, altruistic, honest and diligent."
	Socioeconomic		"It would be organized in a democratic way. It would produce its own food, so it would be self-sufficient, no money used for food."
	Impossible		"There's no such thing as the ideal community. History has shown many times."
Q5 (manipulation)	Agree		"I agree."
	Disagree		"I disagree"
	Other		"It depends."

Source: Own editing

After the pre-defined categories were established, two coders coded the text. Their results were compared and discussed (Graneheim, Lundman 2004) and the new categories and sub-categories were agreed on and finalized. The category or sub-category type "Other" was established for meaning units which did not fit any pre-determined or emergent main or sub-categories and were not relevant to the main focus of the paper. Inter-coder reliability was

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determined by calculating Krippendorff's coefficient using an SPSS macro developed by Andrew F. Hayes (Hayes and Krippendorff, 2007). Inter-coder reliability (Lombard, Snyder-Duch, Bracken 2004) proved to be acceptable, k-alpha= 0.82 ($p \leq 0.05$).

Quantitative analysis

Quantitative analysis was carried out on the sub-sample. The subsample was created from the main sample by selecting cases where questions could be coded into one of the pre-determined or emergent main categories except for the "other" categories. This filtering of data was necessary to avoid validity issues during the statistical analysis (Dong, Peng 2013). As the obtained data was categorical, cross-tables analysis, the Chi^2 test and the Kruskal-Wallis test were used to see if there were any statistically significant relationships between the categories of the four questions.

Qualitative findings

Q1 Mindfulness

This item describes a state of mindfulness when one is an aware witness of what is inside oneself and outside in the present moment. Some sample answers that bear relevance to various aspects of our study:

1. **"**Yes, I do. I need silence inside to be able to hear my authentic self."
2. "Yes, it happens and it's a very good feeling. On such occasions you feel you are part of nature and notice the little beauties around you."
3. "Unfortunately, I can rarely do it. When I can, it can really energize me. I think a lot of people forget how important silence and turning inward are."

Connecting inner silence and the experiencing of one's true/authentic self, as described by the student in the first example, has been explored before (Hodgins, Knee 2002, Heppner, Kernis 2007). For the ever-noisy modern mind inner scilence is an enormous challenge, but as it was emphasized earlier, it is the door that leads to transformation that can resist the gravitational pull of consumerism (Sardello 2008).

Modernity greatly widened the split between humans and nature (Metzner 1993, Cambray 2009). In Buddhist philosophy the ultimate expression of interconnectedness and interdependence is the principle of sunyata (Komito, Rinchen, Dorjee 1987, Van Gordon, Shonin, Griffiths 2017), the understanding of which is an important part of AM. In the second sample answer the realization "you feel you are part of nature" underlines how mindfulness enhances a sense of interconnectedness (Shapiro 2013), a relationship that has been confirmed by empirical research before (Howell et al. 2011, Barbaro, Pickett 2016).

Q2 Sustainability

Sample answers:

1. "In my eyes, sustainability means that my great-grandchildren can experience the wonders of nature that I grew up amongst. My fear is that it will not happen so."
2. "It should, first of all, mean sustainability of the natural environment, that is, we mustn't destroy life on Earth. Secondly, we should manage our resources so that enough of them remains for coming generations. Thirdly, it should mean the maintenance of an acceptable level of living standard so that people can live a „human" life. This is the order of importance."

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There was a dominance of definitions which were short, abstract, usually technical descriptions such as “Repetition of a thing with the same result.”, “Something that is well-planned and its usage is well thought-out.”, “Keeping up a certain level for a long time.”.

The social dimension was missing from all the answers. It applies even to the second sample answer, even though this answer captured some of the complexity of sustainability including the environmental and the economic dimensions. In Kagawa's (2007) research about sustainability dimensions among undergraduates the social issues were only marginally considered. Similar results were found by Watson et al. (2013) and in a Hungarian sample of business students by Deutsch and Berényi (2018). However, the complete lack of the social dimension was somewhat perplexing.

The answers were typically one-sided, grasping only one aspect (e.g. resource use, recycling, standard of living) of sustainability. Out of the three typical dimensions of sustainability the environmental was mentioned most frequently giving support to earlier research (Cebrián and Junyent 2015). Another reason why the second sample answer was unique is the appearance of the hierarchy of embedded systems with nature being the highest level of integration.

The students who focused on future generations in their definitions predominantly used a paraphrase of the Brundtland definition (Keeble 1988). This focus on future generations and needs when defining sustainability appears with a similar intensity in the research of White (2013). The first sample answer is one of three where the intrinsic value of nature appears as something to be saved for generations.

Q3 Economic growth

Sample answers:

1. “Economic development of a given area, growing number of companies with all its positive economic and social impacts on the area.”; “Pay rise, better services, less poverty.”; “Bigger turnover which means bigger profit too.”; “Growing GDP.”; “I get more for my money.”
2. “According to the government our economy is constantly growing, but working people cannot be sure about that at all.”
3. “Apocalypse hidden behind the hypocrisy of corporate CSR.”;” Constant exploitation of the planet.”; “Selfishness, alienation, rat-race, money hunger, if free association is encouraged. Also, our material wellbeing leads to our spiritual illbeing.”; “Exploitation, mountains of trash, starving people, greedy people.”

Considering that the sample of our research consisted of students from two economic faculties, it came as no surprise that the overwhelming majority connected economic growth with economic development, rising wages and employment, intensifying consumption or a rising GDP as can be seen in the first set of sample answers. Interestingly, empirical research on undergraduate students’ perception of and attitude to economic growth is virtually non-existent.

The second sample answer represents a considerable number of respondents deeming economic growth some form of government propaganda. The proposition by Kulcsar and Domokos (2005) that the “growth machine” in the post socialist capitalism in Hungary is heavily influenced by politics seems to be supported by our findings.

The third set of sample answers represents a definite minority of students. Similarly, to the answers given to the question about sustainability, those who voiced concerns tended to do

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it in connection with nature. At the same time, unlike in the answers about sustainability, here some of the reactions express concern about negative social consequences as seen in „Selfishness, alienation, or starvation.". Alienation together with authenticity has been extensively researched in and outside of HE (Rae 2010, Kreber 2013a,b, Zhou, Chao 2018).

Q4 Community building

Sample answers:

1. "People accept and adapt to each other. They accept that everybody is different and learn to see things with the other's eyes. There wouldn't be problems like making ends meet, social inequality, stress, worrying and people would have enough free time."
2. "It would be based on similar foundations as it is now so you shouldn't imagine a dictatorship or something. Everybody would have their responsibilities, we would protect the environment, we would return to basics. Surely, we would miss the comfort and devices of the modern world but you could get used to it."

While definitions of sustainability (question 2) completely lacked the social dimension, ideas about creating a new community were predominantly centered around social issues. The most probable reason for this is the fact that students had to imagine building a community. Recurring themes within the social aspect were democracy, the question of power distribution, the process of decision making, the form of leadership, the principle of equality, the distribution of labour, the tolerance of differences and shared programs. Similarly, to sustainability definitions in question 2 only a very small number of students reflected on all three aspects of sustainability (environmental, social, economic). The environmental aspect almost exclusively emerged in these answers. Within the economic aspect, the most frequently proposed ideas were about self-sustenance in terms of food and bartering of produced goods. Earlier qualitative research and literature on how undergraduates would build an ideal community is non-existent.

Q5 Manipulability

Sample answers:

1. „Yes, most people are easily manipulated and they don't even realize it."
2. „I totally agree. It is an inherent part of human existence: we do it daily, but many don't even notice it. It affects every minute of our life: even my choice to buy bread in a certain place is a result of manipulation.
3. „Day by day I experience that people are in the belief that they are not manipulable. They simply don't notice how often they are manipulated to do certain things."

The dominance of the „agree" answers was overwhelming, almost 100%. Consumerism is a very powerful „awareness trap" where „attention is the basic commodity to be exploited" (Loy 2008, p. 98), thus the role of mindfulness is indeed of key importance. All the above sample answers (and many more) share assumptions such as manipulation goes unnoticed most of the time and it is an inevitable part of daily life. It might be concluded, that after almost thirty years of neoliberalism or embedded neoliberalism in Hungary (Lendvai-Bainton 2017, Bohle, Greskovits 2018) it should come as no surprise.

Quantitative findings

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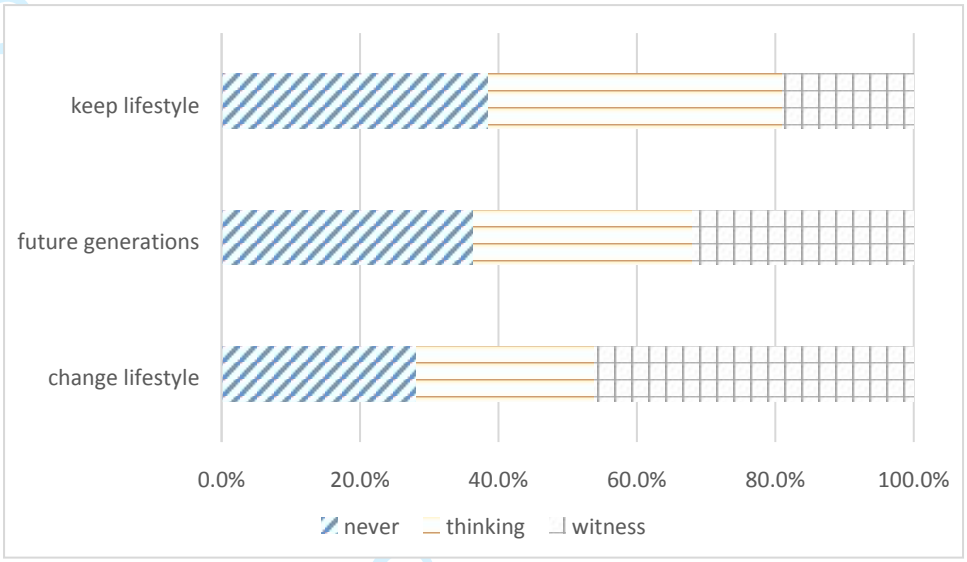
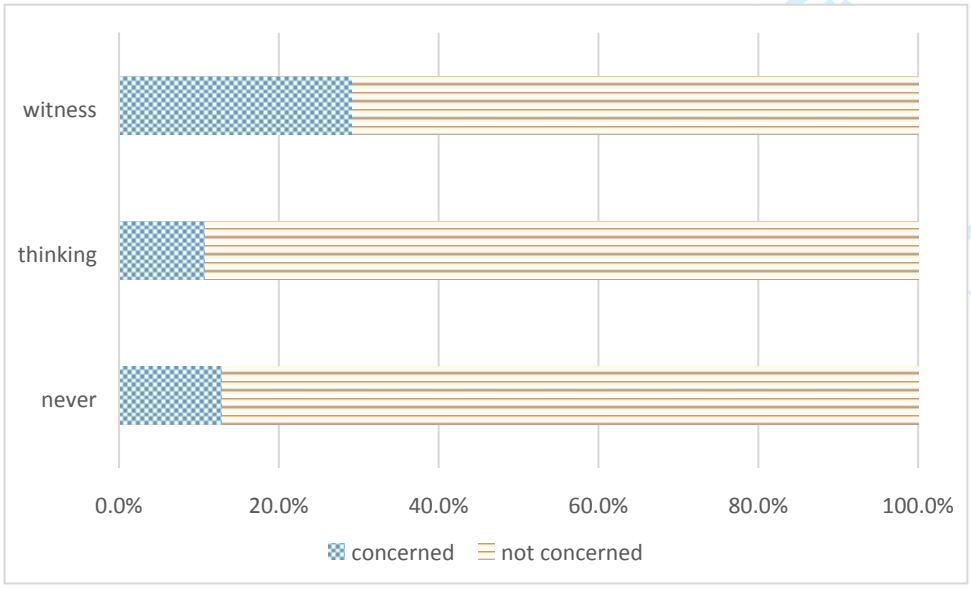


Picture 1. Relationship between categories of sustainability and mindfulness

Source: Own editing

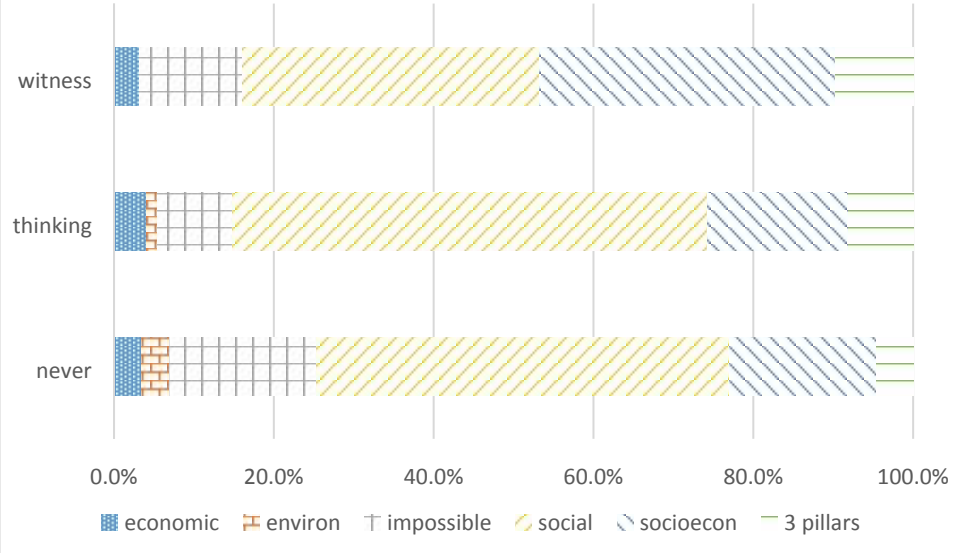
Picture 1. shows the relationship between categories of sustainability and mindfulness and the distribution of mindfulness categories across sustainability categories. The Chi^2 proved that at 5% level of significance that relative frequency of „witness" was higher in the „change lifestyle" category and relatively lower in the other two sustainability categories. The frequency of categories „never" and „thinking" was relatively higher in the categories of „future generations" and „keep lifestyle" compared to the category „change lifestyle" /$Chi^2(4) = 10.34$; $p=0.035$/. These results support earlier research linking mindfulness with sustainable thinking and behaviour (Brown, Kasser 2005, Amel et al. 2009, Sol, Wals 2015, Patel, Holm 2017, Lengyel 2018, Wamsler 2018).



Picture 2. Relationship between categories of economic growth and mindfulness

Source: Own editing

Picture 2. depicts the relationship between categories of economic growth and mindfulness and the distribution of categories of economic growth in the categories of mindfulness. The Chi^2 test proved that at a 5% level of significance, relative frequency of the category „concerned" is significantly higher in the category „witness" than in „never" and „thinking", the other two mindfulness categories /$Chi^2(2) = 10.98$; $p=0.004$/. Our results support empirical research establishing negative correlation between mindfulness and consumerism (Brown, Kasser 2005, Armstrong 2012, Armstrong, Jackson 2015).



Picture 3. Relationship between categories of community building and mindfulness

Source: Own editing

Picture 3. presents the relationship between categories of community building and mindfulness as well as distribution of the categories of community building across mindfulness categories. The Chi^2 test could not be applied because there were too many categories and the number of cells containing 5 or less pieces of information were above 20%. Owing to this the Kruskal-Wallis rank correlation test was used to determine differences. The test confirmed that at a 5% level of significance rank sums were significantly higher in the category „witness" and relatively lower in the categories of „thinking" and „never" /$Chi^2(2) = 8.2$, $p = 0.017$/. The reason for this is that in the category „witness" the higher rank categories of „socioecon" and „sustainable" have higher relative frequency then the category „social". The category „sustainable" includes students who incorporated all three pillars of sustainability into their community building plans. The positive connection between „witness", that is students who spend quiet moments with inner silence, and „sustainable" might signify an underlying connection between mindfulness and a system view of the world. This connection has not been researched yet.

How do the five points of AM appear in the answers?

AM1: 26% of the subsample were coded as "witness", a phrase often used in mindfulness literature to distinguish mindful presence from habitual thinking, rumination, or future speculation (Kabat-Zinn 1995, Siegel, Germer, Olendzki 2009). Quantitative results support

earlier research proving that mindfulness can be an effective antidote of consumerism, more mindful students were more likely to suggest a change in consumer lifestyle (transformation).

AM2: Overall, students demonstrated a very low sense of interconnectedness. Intergenerational justice (concern about the needs of future generations) was mentioned by 7% of students in the answers to Q2. Only three students described nature as the manifestation of intrinsic beauty referring to its „wonders". In Q2 16,8% was concerned about the health of the environment, but none of them demonstrated a comprehensive systems view of sustainability by including at least three pillars in their definition. What became apparent even before completing the coding process was the total absence of the social aspects of sustainability (e.g. inequality, poverty, health, cultural diversity) along with a high percentage (24,2%) of short and technically worded definitions and one-dimensional descriptions (71,6%). Low levels of systems thinking is one of the "fruits" of modern world view fragmenting the world into seemingly unconnected disciplines (Betts 1992, Sterling 2004, Meadows 2008, Lozano et al. 2015). It has also been demonstrated by empirical research among undergraduates (Hiller-Connell, Remington, Armstrong 2012, Palmberg et al. 2017).

AM3: In the answers to Q2 two students mentioned the importance of respect, one in connection with nature and one in connection with traditions. In the answers to Q4 eleven students (2,7%) considered respecting others' personalities, religion or otherness important. The terms "compassion", "humility" or their derivatives or synonyms are not used in the answers at all. The complete neglect of compassion is also reflected by the fact, pointed out above, that the social dimension is not considered in any of the answers.

AM4: The term "carrying capacity" is not mentioned in any of the answers. Some understanding of it appears indirectly in answers to Q2 of those who expressed concern for the environment (16,8%), in answers to Q3 of those who showed concern about economic growth (12,6%) and in answers to Q4 of those who included the protection of the environment as a community building priority (3,5%). The importance of spiritual life is mentioned by only two students in their answers to Q4 and related terms like "inner peace" are mentioned by 2% of students in the answers to Q1. The term "creativity" does not occur at all and "culture" appears indirectly in the answers to Q4 of those who mention the importance of traditions and joint celebrations (2,5%).

AM5: Earlier in the paper the importance of universal values (e.g. nature's intrinsic values, modesty, compassion, tolerance) was emphasized. The mentioning of the term "value" in the answers is sporadic. In answers to Q2, four students mention protecting "natural values" and four writes about "keeping values" but do not specify what they mean by value. In answers to Q3, "value" appears in the definition of eight students (2%). Seven of these are used in an economic sense in expressions like "value of money", "GDP value", "economic value", but one respondent expresses concern about "exchanging true values for money". In answers to Q4 six students (1,5%) mention the term in expressions such as "universal values and norms", "universal values of the Bible", "basic family and human values", "shared values", "special value of joint programs" or "value of leaders". Earlier research (Fatoki 2014, Kajonius, Persson, Jonason 2015) seem to support our findings and can lead to the obvious conclusion that there is a strong deficit in values among students of HE in consumer societies

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Conclusions, practical implications and limitations

The goal of the present paper was to direct attention to the important role universal human and environmental values should play in a truly, that is ethically, authentic sustainability curriculum in HE. The authors outlined the theoretical foundation and created a set of values called "Authentic Minimum" (AM) which can serve as a horizon of significance on the road to the urgently needed paradigm change from our dying consumer "civilization" to an authentic life based on universal human and environmental value. The urgency is underlined by the findings of our qualitative empirical research which, supporting earlier literature, demonstrates that undergraduate students have an alarming deficit of mindfulness, sustainability literacy, universal values concerning nature and fellow humans and system thinking.

While it has been quite obvious for decades that a paradigm change concerning our world view and a corresponding change in consumer lifestyle is indispensable if we are to make an authentic move towards planetary sustainability, many of us in higher education still seem hesitant as to what could trigger such a paradigm shift (Piasentin, Roberts 2018). As a starting point it is important to understand that our inaction (Gifford 2011) is „… *not primarily a scientific, technological or economic failure, but the result of deep psychological mechanisms which cause the constant and extended reproduction of the consumer system, that is, unsustainability*". (Lengyel 2018, p. 17). This is why mindfulness occupies such a unique position in the AM. There is rich literature on economic growth, neoliberalism and mindfulness in HE literature, however, no earlier work has attempted to integrate these three areas of research into an ethically authentic sustainability curriculum.

Practical implications of the present paper are many all sharing, however, the need for existential courage on the part of teachers, students and leaders of HEIs. Existential courage is required for profound personal transformation, for going against mainstream ideology and the possible confrontations with colleagues, leaders of institutions, students, friends or family members. This is the existential courage that master teachers like Buddha or Jesus talked about.

The empirical research has some obvious limitations that warrant caution in generalizing the results. A sample of convenience was used and the base population of the survey consisted only of students of economics in two economic faculties of two Hungarian universities. Although intercoder reliability proved to be good in analysing answers to open ended questions, it will always imply a higher level of subjectivism than one can find in purely quantitative research. With all the limitations, the authors managed to obtain rich data that can encourage further research in these directions.

Acknowledgements

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