



Butler University
Digital Commons @ Butler University

Undergraduate Honors Thesis Collection

Undergraduate Scholarship

2018

What a Difference a Course Makes: Early College Experience Fosters Flexible and Transcendent Self-Identities

Hannah Faccio
Butler University

Follow this and additional works at: <https://digitalcommons.butler.edu/ugtheses>



Part of the [Psychology Commons](#)

Recommended Citation

Faccio, Hannah, "What a Difference a Course Makes: Early College Experience Fosters Flexible and Transcendent Self-Identities" (2018). *Undergraduate Honors Thesis Collection*. 436.
<https://digitalcommons.butler.edu/ugtheses/436>

This Thesis is brought to you for free and open access by the Undergraduate Scholarship at Digital Commons @ Butler University. It has been accepted for inclusion in Undergraduate Honors Thesis Collection by an authorized administrator of Digital Commons @ Butler University. For more information, please contact digitalscholarship@butler.edu.

BUTLER UNIVERSITY HONORS PROGRAM

Honors Thesis Certification

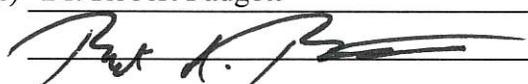
Please type all information in this section:

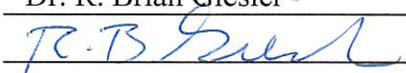
Applicant Hannah E. Faccio
(Name as it is to appear on diploma)

Thesis title What a Difference a Course Makes: Early College Experience
Fosters Flexible and Transcendent Self-Identities

Intended date of commencement May 12th, 2018

Read, approved, and signed by:

Thesis adviser(s) Dr. Robert Padgett 5/8/18
 Date

Reader(s) Dr. R. Brian Giesler 5/8/18
 Date

Certified by _____ Date _____
Director, Honors Program

What a Difference a Course Makes: Early College Experience Fosters Flexible and Transcendent Self-Identities

A Thesis

Presented to the Department of Psychology

College of Liberal Arts and Sciences

and

The Honors Program

of

Butler University

In Partial Fulfillment

of the Requirements for Departmental Honors

Hannah E Faccio

05/08/2018

Table of Contents

Abstract.....p. 3

What a Difference a Course Makes.....p. 4

 Theories of Identity.....p. 4

 Mindfulness and Identity.....p. 6

 Identity and Education.....p. 7

 Current Study.....p. 8

Method.....p. 9

 Participants.....p. 9

 Design and Materials.....p.10

 Procedure.....p. 11

 Response Coding.....p. 12

Results.....p. 15

Discussion.....p. 18

 Limitations and Implications.....p. 20

Conclusion.....p. 21

Abstract

The college experience is often referenced as a period of 'finding yourself.' The concept of self-identity is considered malleable and often formed during time spent at a university or college. One way universities provide opportunity for changes in identity is by offering liberal arts core curriculum courses that allow for the broader thinking of the self, the world, and of one's experiences. Examples of these courses include Honors and First-Year Seminar (FYS) courses. These courses offer exposure to new topics, ideas, and cultures, which can help students better understand themselves and their place in the world. I hypothesized these courses will assist in helping students change from rigid and concrete senses of identity, to more flexible and transcendent senses of identity. Specifically, I predicted students in these courses would come to describe themselves and their experiences in less rigid and more flexible ways at the end of the semester compared to descriptions of self and experiences at the beginning of the semester. As expected, the data has indicated students in FYS and Honors courses in the beginning of the semester show high levels of rigid descriptions of themselves and their experiences, but show lower levels of rigid descriptions at the end of the semester.

What a Difference a Course Makes: Early College Experience Fosters Flexible and Transcendent Self-Identities

We are not the same people we were ten years ago, five years ago, or for the younger members of our society, even one year ago. As dynamic human beings, our sense of identity fluctuates with our experiences. We meet new people, make new connections, are exposed to new ways of thinking, and experience changes in ourselves, all of which assist in the formation of our self-identity. Biologically, we develop in our teen years and into our early twenties. It is relatively common for changes to occur in one's personal identity across time, and these developmental changes can be shaped by different experiences. Jeffrey Arnett of the University of Maryland College Park (2000) has theorized that the period between age 18 and 25 is a period of *emerging adulthood*, during which many people have the freedom to ponder the grand variety of life-path opportunities, frequently involving our romantic lives, our work, and our world-views. This period is often when young adults go off to college, and this college experience is frequently referenced as a time of 'finding yourself.' The sense of self-identity is malleable and therefore often formed during time spent at a university or college.

Theories of Identity

Many different theories of self-identity exist, along with different uses of terms and definitions. While researchers have studied many different ways to examine identity formation and development (e.g., Ajzen, 1991; Burke 1980; McCall and Simmons, 1978; Stryker, 1968; Turner, 1978; Hogg and Abrams, 1988; and Tajfel and Turner, 1979), of particular interest in this study is the description of identity by Torneke (2010) and

others (e.g., Parrott 1984; Skinner 1957; and Bowlby 1988), that characterizes types of self-identity into three main categories: Self-as-story, Self-as-process, and Self-as-perspective. In a chapter explaining these senses of self (Atkins & Styles, 2017), the Self-as-story category is defined as “any self-description of characteristics preferences, capabilities, and experiences; the sort of behavior we engage in when we meet someone new and wish to describe ourselves” (p. 138). Hayes and colleagues (2001) defined Self-as-process as describing self-experience in the present; this includes the dynamic and continuous flow of thoughts and feelings. Lastly, Atkins & Styles (2017) defined Self-as-perspective as “the perspective from which experience is observed rather than the content that is observed” (p. 141).

To study how these sense of self work, Atkins & Styles (2017) conducted a study to see if the participants’ senses of self changed after participating in a Mindfulness-Based Stress-Reduction (MBSR) course. The participants were interviewed in-person with structured questions that were intended to measure and identify their sense of self-identity. As interviewers analyzed and coded responses, they further defined Self-as-story as having two facets: Self-as-rigid-story and Self-as-flexible story. Atkins and Styles (2017) defined Self-as-rigid-story as involving the story being presented in a fixed manner and Self-as-flexible-story as involving the story being presented in a manner that does not have a strict influence on behavior; for example, in a way that represents a ‘go with the flow’ attitude. In a study of the identities of adolescents in different stages, Chen, Lay, and Wu (2005) claimed that those in the college stage had a much higher degree of ‘firmness’ in their personal, social, and image identities (compared to those in junior high and high school stages). This firmness, in the sense of identity, represents

what Atkins & Styles considered a 'rigid' identity. It has been found that enduring MBSR training resulted in participants describing themselves and their experiences with more flexible perspectives (Atkins & Styles, 2017).

Mindfulness and Identity

Mindfulness has been popular in modern social psychological research, and can be defined in a range of ways. Along with many definitions, mindfulness can also take many forms, including a process, a brief mentality, or a more concrete trait (e.g., Bishop et al., 2004; Davison, 2010; Brown and Ryan, 2003). For the purpose of this research, mindfulness will be assumed to include considering oneself as an observer of experiences, mentally being in the present moment, accepting experiences as they are without considering them further, and attempts to quiet the mind (Atkins & Styles, 2017). Mindfulness has been known to be measured in a multitude of ways, most popularly with the Five-Facet Mindfulness Questionnaire, Freiburg Mindfulness Inventory, Mindful Attention Awareness Scale, etc. (Hill & Labbe, 2014). These measurement tools have allowed researchers to identify the main contributing aspects of mindfulness. Baer et al. (2006) of University of Kentucky mentions "our findings clearly suggest that non reactivity and non judging of inner experience are useful facets [of mindfulness]...That is, to accept an experience, such as feeling anxious, might include refraining from judgments or self-criticism about having this experience (non judging) and refraining from impulsive reactions to the experience (non reactivity)" (p. 42).

Mindfulness is becoming common practice not only to yoga studios, but also in larger corporate organizations. Has its practice gained traction in the academic environment? Several researchers have conducted studies that introduce mindfulness

courses or training into secondary academic environments and university settings (e.g., Franco et al., 2013 and Bellinger et al., 2015). Birnbaum (2005) found, in a study of how mindfulness meditation may transform professional self-concepts of social-work students, that after participating in mindfulness meditation sessions, students formed relations between new knowledge and their self-perceptions. Birnbaum also maintained that students were provided the opportunity to better understand themselves and what directs them. These findings are consistent with the notion that mindfulness may allow for a broader scope of thinking and a better understanding of one's place in this world.

Identity and Education

Indirectly, this sort of mindful thinking may be an underlying side effect of core curriculum courses that students are required to enroll in at universities. Obviously, students take all sorts of courses during their college careers, including courses revolving around the 'core curriculum' (typical in liberal arts college programs). These courses allow for broader thinking of the self, the world, and of experiences. Core curriculum often instills the very values of a liberal arts education. Timm Thorsen of Alma College mentions in *Liberal Arts-Search for Meaning* that: "Liberal Arts education requires high cultural context and systematic skepticism and provides a foundation for wise discernment in meanings we construct and life's purpose and actions" (2013, p. 1). The described broader scope of thinking of experiences resembles that of mindfulness, and therefore, liberal arts core courses may have the ability to subtly encourage mindful thinking in students.

In support of this perspective, there are many studies that have researched the role of liberal arts and core courses, some of which hint at the idea of student identity-

development and mindfulness characteristics. For example, Gaff (1991) argued that first-year seminars have the ability to enhance value conflicts and allow students to become more aware of their values. Therefore, it is likely that students undergo some sort of self-development during these courses. Ishler (2003) argues that first-year seminars have the ability to fulfill goals in relation to the development of a student's mind. These goals are similar to those that Stearns (2002) mentions can be achieved by general education: student minds that value an assortment of topics, think critically, and learn independently. This supports the notion that students may experience changes in their self-identities throughout their core and honors courses during college. Further, Ishler (2003) states: "[Postsecondary education] is about being exposed to broader educational experiences such as studies in aesthetic appreciation, civic life, cultural understanding, personal development, social understanding, sciences, and technology" (p. 73-74). These broader experiences can assist in student's identities becoming less rigid, and more flexible which is an important developmental milestone according to Atkins & Styles (2017).

Current Study

This study aimed to discover if students who take a First-Year-Seminar (FYS) or Honors course experience a shift in their sense of self-identity during the course. Based on the research reviewed, I hypothesized that a student's sense of self-identity would change over the course of the semester from rigid Self-as-story descriptions, to more flexible and transcendent descriptions, due to the broad sense of thought students are exposed to in FYS and Honors courses.

Hypothesis 1: Participants at Wave 1 (at the beginning of the semester) will have

higher scores for Self-as-rigid-story descriptions than for those at Wave 2.

Hypothesis 2: Participants in Wave 2 will have higher scores for Self-as-flexible-story descriptions when compared to Wave 1 Self-as-flexible-story scores.

Hypothesis 3: Participants in Wave 2 will have higher scores for Self-as-process descriptions when compared to Wave 1 Self-as-process scores.

Hypothesis 4: Participants in Wave 2 will have higher scores for Self-as-perspective descriptions when compared to Wave 1 Self-as-perspective scores.

Method

Participants

Participants were undergraduate students at Butler University who were enrolled in either a First-Year Seminar or Honors course for the Fall 2017 semester (Wave 1 N=87, Wave 2 N=21). In Wave 1 at the start of the semester (approximately two weeks after the start of classes), there were 26 male and 61 female participants. In Wave 2 at the end of the semester (approximately two weeks before the end of classes), there were 3 male and 18 female participants. Also in Wave 1, a majority of the participants were first-year students (N=70) (80%), while only 20% of participants were second year students or higher level (N=17). Participants in Wave 2 were more evenly distributed across grade levels, with 9 participants in their first-year (43%) and 12 in a more advanced year (57%). Participants that completed Wave 1 were invited and encouraged to also complete Wave 2, however, only seven participants did so. Therefore, most Wave 2 participants had never filled out Wave 1 and data were analyzed as between subjects. Participants were recruited using both the FYS and Honors student listservs over the Butler email system. An incentive of the option to be included in a drawing for

one of eight \$25 Amazon gift cards was offered, and it was clearly indicated that both Wave 1 and Wave 2 surveys must be completed for the option to enter into the drawing.

Design and Materials

Inspired by Atkin's & Style's work, I researched interview techniques to prompt participants to express their perspectives of self and experiences. An interview technique developed by Berger and Atkins (2009), called the Subject-Object Interview (SOI), was beneficial in prompting participants to write about their experiences, and the way they understand their experiences. The SOI uses open-ended questions that provide a base for the participant to respond to, and from there, the interviewer develops questions as she or he goes, basing their next question on the participant's previous response. Therefore, the method is not entirely structured. It is believed that this method "deals with the most fundamental aspects of the participant's meaning making in life" (Berger & Atkins, 2009, p. 24) and that it takes participants to the very edge of their meaning-making methods, which gives people "a sense of their own limits" (Berger & Atkins, 2009, p. 24).

I used the idea behind the SOI method to collect responses from our participants. However, I made alterations and used more fixed questions to collect data from a larger sample than could be interviewed individually with the in-person method. The questions were structured in a way that I believed would still provide participants with the same opportunity to push to the edges of their meaning-making and perspective taking; however, they would still have ample time to think through their responses in a logical manner.

In Appendix A, the questions that were included in the survey are listed. The questions were derived from Atkins & Styles (2017) work, in which participants provided responses to questions that intended to elicit Self-as-rigid/flexible/process/perspective descriptions. From these responses, I was able to formulate questions I believed would encourage descriptions of the self that covered the four categories of self-identity used in this study. For example, one of Atkins & Styles (2017) participants responded to a prompt with: “I am not that sort of person; I am more of an introvert”. From this response, I derived the question: “Do you consider yourself to be more extroverted or more introverted? What makes you feel that way?”, which was intended to elicit a response that would fit under the Self-as-rigid-story or Self-as-flexible-story self-identity categories.

Procedure

The study involved two Qualtrics surveys that were completed by FYS and Honors students. The first survey (Wave 1) was completed at the beginning of the semester (within the first few weeks of the start of the course), and the second (Wave 2) was completed toward the end of the semester (before classes ended for winter break). The Wave 1 survey began with a consent agreement, and continued with questions about which course and section participants were enrolled in. In addition to demographic questions, such as gender and year in school, participants were asked to provide responses to ‘linking questions’, which would be used to link responses between the Wave 1 survey and the Wave 2 survey without obtaining identifiable information.

After answering questions relating to the above information, 16 questions assessing sense-of-self were asked. Questions were categorized into different sections, including 'About the Course and How You Learn', 'About You', 'Things You Do', 'About Your Attitudes', and 'Things That Bother You'. Each question was designed to elicit a response representative of a particular sense of self (rigid-story, flexible-story, process, or perspective) and had a text box where the participant could type their response without limits. After the questions that assessed sense of self, a mindfulness measure was included. The measure was the Five Facet Mindfulness Questionnaire (Baer et al. 2006), and it was used to see if the different facets of mindfulness had a relationship with the different senses of self. The ending screen displayed a message thanking the participant for their time and confirming their responses have been recorded.

The Wave 2 survey was again distributed using the same email listservs toward the end of the semester. This survey very similarly resembled the Wave 1 survey, with the exception of no mindfulness questionnaire, and again included the linking questions and questions assessing the sense-of-self. Upon completion of the Wave 2 survey on Qualtrics, participants had the option to click a new link which would take them to a separate form in which they could enter into the gift card drawing by providing their name and email. The responses to this gift card form were never made available to me, and gift card distribution was handled by the department administrative specialist, who otherwise has no connection to the study.

Response Coding

Due to the responses being in text format, it was necessary to code the text responses for analysis. Two coders translated the text into numerical data, and tests

were performed to measure reliability. Each response included anywhere from a sentence fragment to a multiple-sentence paragraph. Each sentence/fragment in each response got its own score with its respective sense of self category. The method in which responses were validated was derived from the Atkins & Styles (2017) chapter, in which the researchers give a multitude of example responses for each sense of self category.

To begin the coding process, we first identified which category of self-identity the response best fit under. One person simply made a judgement about which category the statement was most relevant to. It was possible that one sentence or paragraph fit under multiple categories, and a score was given for each category represented in the response. After categorization, the response (or each sentence of a response) could be considered as 3 (strong example), 2 (medium example), and 1 (weak example). For example, one response for the question “How would you describe yourself as a student? How do you see yourself as a person?” was *“I am a very ambitious student who works hard. A lot of those traits come from my personality. I am a person who likes to help others and makes that a main goal of mine.”*. This response received a single ‘3’ for the Self-as-rigid-story category due to the strict self-categorization (i.e., “I am a...”) and the relation to their personal values (i.e., “A lot of those traits come from my personality”). If the three sentences in the above response had differed in terms of category (i.e., not all were representative of Self-as-rigid-story), each sentence would receive its own separate score.

For the prompt “Think of a unique behavioral attribute of yours. Describe why it is you feel that way.”, one response read *“I think a unique behavioral attribute that I have*

is that I am unrealistically optimistic.”. This response received ‘2’ for the Self-as-rigid-story category because instead of a direct and concrete statement, the sentence begins with the phrase, “I think”. It also received a ‘1’ for the Self-as-process category due to the phrase “I think” abstractly representing the internal workings of the participant’s mind. An example of a ‘3’ in the Self-as-process category was the response *“I’m kind of confused about the question”* for the question “Are you very judgmental about your past? How so/not?”. This constituted a ‘3’ because it clearly represents the description of what that person is currently experiencing in that moment (confusion). It was decided which number to give the response (3, 2, or 1) by comparing the response with descriptions and example statements pulled from the work of Atkins & Styles (2017).

As mentioned previously, the surveys included 16 different questions. The response to each question had the potential to earn a score in one or multiple categories. If one response was applicable to two categories, it was given a score for each of the two relevant categories. For each survey wave, the same coding process was used. Throughout the coding process, any question for any participant received a score for its respective category, regardless of whether or not the entire survey was complete.

To test for the reliability of this coding method, scores were averaged by question, subject, and the senses of self. Next, a sample of 10 participants’ data was coded by Coder 1 and was compared to those same 10 participants’ data coded by Coder 2. The averages were correlated on all four senses of self between the two coders.

Results

The correlations between the two coders provided reliability estimates for each of the four identity constructs. For Self-as-rigid, the correlation between the two coders' scorings was $r = .297$; for Self-as-flexible, the correlation was moderately strong $r = .549$; for Self-as-process, the correlation was even stronger with $r = .614$; lastly, for Self-as-perspective, the correlation was weak with $r = .017$.

Despite the intended within-subjects design of the study across the two waves, only seven participants completed both the Wave 1 and Wave 2 surveys. Therefore, a within-subjects analysis could not be used to examine the primary hypotheses. I therefore analyzed the two waves of data collection as a between-subjects design instead. I hypothesized that at Wave 1, participants would use more Self-as-rigid descriptions than of those at Wave 2. Furthermore, I also hypothesized that Wave 2 participants would use more Self-as-flexible, Self-as-process, and Self-as-perspective descriptions in their survey responses when compared to those of Wave 1. Analyses for each sense of self are included below, and the tables report the mean aggregated average scores for each sense of self by year in school (first-year or advanced) and wave (1 or 2):

Self-as-Rigid-Story

Means and standard errors for the Self-as-rigid-story scores are presented in Table 1. After running a 2 X 2 ANOVA with time (wave 1 or wave 2) and school year (first-year vs. advanced), a significant main effect was found for time (Wave 1: $M = 2.775$, $Sd. = 0.024$; Wave 2: $M = 2.132$, $Sd. = 0.039$) on the Self-as-rigid category

($F(1,104)=202.37, p=.000$), but not for year in school ($F(1,104)=0.458, ns$). There was no significant interaction effect found in this category either, ($F(1,104)=0.312, ns$).

Table 1: Self-as-Rigid-Story Means by Year in School and Wave

<u>Year in School</u>	<u>Wave</u>	<u>Mean</u>	<u>Standard Error</u>
First-year	1	2.782	0.021
	2	2.094	0.058
Advanced	1	2.767	0.042
	2	2.170	0.050

Self-as-Flexible-Story

Below in Table 2, the means and standard errors are presented for Self-as-flexible-story scores. A 2 X 2 ANOVA was run again for each category. No significant main effects were found for time, ($F(1,104)=.333, ns$), or year in school, ($F(1,104)=2.494, ns$), in the Self-as-flexible category. There was also no significant interaction effect, ($F(1,104)=.749, ns$).

Table 2: Self-as-Flexible-Story Means by Year in School and Wave

<u>Year in School</u>	<u>Wave</u>	<u>Mean</u>	<u>Standard Error</u>
First-year	1	2.098	0.077
	2	2.146	0.215
Advanced	1	1.979	0.156
	2	1.738	0.186

Self-as-Process

Table 3 below shows the means and standard errors for the Self-as-process category scores. According to the 2 X 2 ANOVA, there were no significant main effects for time, ($F(1,104)=.058, ns$), or year in school, ($F(1,104)=.566, ns$), for the Self-as-process category. Again, there was no significant interaction effect for this category, ($F(1,104)=1.017, ns$).

Table 3: Self-as-Process Means by Year in School and Wave

<u>Year in School</u>	<u>Wave</u>	<u>Mean</u>	<u>Standard Error</u>
First-year	1	0.539	0.124
	2	0.333	0.346
Advanced	1	0.471	0.252
	2	0.806	0.299

Self-as-Perspective

Lastly, Table 4 shows the means and standard errors for Self-as-perspective scores. After running a 2x2 ANOVA for the Self-as-perspective category, no main effects were found for time, ($F(1,104)=.015, ns$), or for year in school, ($F(1,104)=.097, ns$). No significant interaction effect was found, ($F(1,104)=.217, ns$).

Table 4: Self-as-Perspective Means by Year in School and Wave

<u>Year in School</u>	<u>Wave</u>	<u>Mean</u>	<u>Standard Error</u>
First-year	1	1.649	0.125
	2	1.556	0.348
Advanced	1	1.439	0.253
	2	1.597	0.301

As an exploratory analysis, correlations were examined between the five facets of mindfulness (included in the Wave 1 survey) and the senses of self to determine if there were any existing relationships or patterns. The five mindfulness facets are representative of those mentioned in the Baer et al. (2006) article as follows: ‘Observe’ is the ‘Observing/noticing/attending to sensations/perceptions/thoughts/feelings’ facet; ‘Describe’ is the ‘Describing/labeling with words’ facet; ‘Act’ is the ‘Acting with awareness/automatic pilot/concentration/non-distraction’ facet; ‘Nonjudge’ is the ‘Non-judging of experience’ facet; and ‘Nonreactivity’ is the ‘Nonreactivity to Inner Experience’ facet. The correlations between the mindfulness facets and the senses of self are presented in Table 5. As can be seen in the table, the only correlation that was

significant at the $p=0.05$ level was that between Self-as-perspective and the mindfulness facet of 'Describe', with $r = -0.280$.

Table 5: Correlations between Mindfulness Facets and Sense of Self

Sense of Self	<u>Mindfulness Facets</u>				
	Observe	Describe	Act	Nonjudge	Nonreactivity
Self-as-Rigid-Story	-0.192	0.182	-0.052	0.197	-0.038
Self-as-Flexible-Story	-0.015	0.182	0.115	0.177	-0.023
Self-as-Process	-0.147	-0.010	-0.005	0.214	0.019
Self-as-Perspective	0.072	-0.280*	-0.106	-0.035	0.162

Discussion

This study sought to discover whether core courses, particularly first-year seminars and honors courses, have an impact on students' identities in terms of their senses of selves. My purpose was to discover the influence of these courses on how students describe themselves and their experiences. Specifically, this study aimed to see if student's self-descriptions would alter from rigid to more flexible and transcendent across the course of a semester in these courses.

My results suggest that these courses may not have as big of an influence on students' senses of self as originally predicted. Participants did have significantly lower Self-as-rigid descriptions in their responses from Wave 1 compared responses to Wave 2, which provides support for H1 that average scores for Self-as-rigid descriptions would be higher at Wave 1 versus Wave 2. This finding is in line with previous research, such as Atkins & Styles (2017), that mentions broader experiences (in this case, core curriculum) have the potential to lessen the rigidity of students' identities. The finding of higher scores for Self-as-rigid descriptions in Wave 1 is also in line with findings from

Chen et al.'s (2005) study which suggest those in the college stage of life have more 'firmness' in identities.

The remaining hypotheses, however, were not directly supported. Specifically, Self-as-flexible descriptions, Self-as-process descriptions, and Self-as-perspective description scores did not increase significantly from Wave 1 to Wave 2. This was relatively unexpected; however, there are trends that might offer insight to these findings. Advanced year participants tended to show an increase in Self-as-process and Self-as-perspective descriptions in their responses from Wave 1 to Wave 2, while first-year participants tended to show a decrease. Perhaps this can be attributed to a higher maturity level of advanced year students, and thus they have more potential when it comes to increasing their understanding of themselves in terms of Self-as-process and Self-as-perspective.

Trends also show that descriptions in Self-as-flexible category tended to increase from Wave 1 to Wave 2 for first-year students, but not advanced year students. In fact, advanced year students actually decreased in Self-as-Flexible descriptions from Wave 1 to Wave 2. The observation that first year students show an increase in Self-as-flexible descriptions in their responses from Wave 1 to Wave 2 is in line which claims made by Gaff (1991) that emphasize the ability of first year seminars to foster students' value conflicts and increase their awareness of their values. Perhaps it is this awareness of one's own values and of conflicting values that allowed first-year participants (who are in first-year seminar courses) to come to describe themselves in more flexible ways at Wave 2 than at Wave 1. Also, advanced year students tended to decrease in Self-as-Flexible descriptions across the semester. Perhaps older students

begin to settle into their views of themselves and their experiences more so than first-year students, and hence are less flexible. It is also possible that they had already undergone some sort of identity transformation earlier in their college careers. In this case, it might have taken a stronger influence to further influence their identity.

In a broader sense, it is possible there were not many significant differences of the senses of self between Wave 1 and Wave 2 observed due to aspects of the courses and educational structure themselves. It is not unreasonable to wonder if students do not take core courses as seriously as they do other courses, such as courses that are directly tied to their major field of interest or study. Without proper attention, students may not experience all that core courses have to offer in terms of the ability to shape identity development. Another potential factor influencing the results might be the composition of Honors classes. Students in the Honors program frequently have classes with the same students each semester. This may lessen the degree to which students are having 'broader experiences', which assist in students becoming more flexible in their identities (Atkins & Styles, 2017). Being exposed to the same people versus new people may hinder the broadness of experiences students have in the course.

Lastly, there was a lack of significant correlations between the mindfulness facets and sense of self categories. Perhaps this had something to do with the fact mindfulness was measured as a trait and only on the Wave 1 survey.

Limitations and Implications

Despite the insight the present study provided, there are several limitations. First, the method used to code the participants' responses was lacking in strong reliability.

The relatively low correlations among the two coders' scoring may indicate the method does not capture the sense of self concepts as well as it should. Perhaps a more comprehensive coding method involving increased coder-training would lead to higher reliability, which would have shown more consistent results.

Next, a lack of response in the Wave 2 survey restricted the way in which the data were analyzed. Although 21 participants completed the Wave 2 survey, only seven of them had also completed Wave 1 (potentially due to it occurring during the end of the semester). This hampered analyzing the data within subjects.

In addition to the previous limitations, the fact that a semester is only 3 months long may have been a factor as to why more identity change was not discovered. This factor is accentuated due to the fact that courses are usually held on only two or three days a week. This does not leave much time for many significant changes in identity to take place.

Overall, participants in this study did demonstrate significantly lower Self-as-rigid descriptions at the beginning of the semester compared to the end, which is in line with previous research. There were some trends identified among the differences between the scores of the remaining senses of self between Wave 1 and Wave 2, however, these differences were not statistically significant. Limitations concerning the reliability of the coding measure, lack of response to the Wave 2 survey, and shortness of semesters may have contributed to the results.

Conclusion

The present study found evidence that Self-as-rigid descriptions decrease significantly over the course of a semester in FYS or Honors courses which provides

support for the claim that first-year seminar and honor's courses result in changes in student's identity in terms of how they come to describe themselves and their experiences. Otherwise, there were no significant differences found between the beginning and end of the semester with Self-as-flexible, Self-as-process, and Self-as-perspective descriptions, which may suggest there is only a limited impact of such courses on the identity of college students.

References

- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. doi:doi.org/10.1016/0749-5978(91)90020-T
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480.
- Atkins, P. W. & Styles, R. (2017). Mindfulness, identity, and work: mindfulness training creates a more flexible sense of self . In P. W. Atkins and J. Reb (Authors), *MINDFULNESS IN ORGANIZATIONS* (pp. 133-162). S.I.: CAMBRIDGE UNIV PRESS.
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13, 27- 45.
- Bellinger, D. B., DeCaro, M. S., & Ralston, P. A. (2015). Mindfulness, anxiety, and high-stakes mathematics performance in the laboratory and classroom. *Consciousness and Cognition*, 37, 123-132.
- Berger, J. & Atkins, P. (2009) Mapping complexity of mind: using the subject-object interview in coaching, *Coaching: An International Journal of Theory, Research and Practice*, 2:1, 23-36, DOI: 10.1080/17521880902780989
- Birnbaum, L. (2005). Connecting to Inner Guidance: Mindfulness Meditation and Transformation of Professional Self-Concept in Social Work Students. *Critical Social Work*, 6(2).

- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., et al. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11, 230– 241.
- Bowlby, J. (1988). Developmental Psychiatry Comes of Age. *The American Journal of Psychiatry*, 145(1), 1-10.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822-848.
- Burke, P. (1980). The Self: Measurement Requirements from an Interactionist Perspective. *Social Psychology Quarterly*, 43(1), 18-29. Retrieved from <http://www.jstor.org/stable/3033745>
- Chen, K., Lay, K., & Wu, Y. (2005). The developmental differences of identity content and exploration among adolescents of different stages. *Chinese Journal of Psychology*, 47(3), 268-286.
- Davidson, R. J. (2010). Empirical explorations of mindfulness: Conceptual and methodological conundrums. *Emotion*, 10, 8–11.
- Franco, C., Cangas, A. J., Mañas, I., & Gallego, J. (2013). Exploring the Effects of a Mindfulness Program for Students of Secondary School. In *Governance, Communication, and Innovation in a Knowledge Intensive Society* (pp. 153-167). IGI Global.
- Gaff, J. (1991). *New life for the college curriculum: Assessing achievements and furthering progress in the reform of general education*. San Francisco: Jossey-Bass.

- Hayes, S. C., Barnes-Holmes, D., and Roche, B. (2001). *Relational frame theory: a post-Skinnerian account of human language and cognition*. New York: Kluwer Academic/Plentum Publishers.
- Hill, Benjamin D. & Labbé, Elise E. (2014). Measuring Mindfulness. In S. N. Nirbhay (Author), *PSYCHOLOGY OF MEDITATION* (pp. 11-27). Nova Science Publishers.
- Hogg, M. and Abrams, D. (1988). *Social Identifications: A Social Psychology of Intergroup Relations and Group Processes*. London: Routledge.
- Ishler, J. (2003). LAYING THE FOUNDATION FOR GENERAL EDUCATION: THE | ROLE OF FIRST-YEAR AND SHORT SEMINARS. *The Journal of General Education*, 52(2), 71-83.
- Liberal arts-search for meaning. (2013). *Michigan Academician*, 41(2), 201-203.
- McCall, G. and Simmons, J. (1978). *Identities and Interactions*. Revised Ed. New York: Free Press.
- Parrott, L. J. (1984). Listening and understanding. *The Behavior Analyst*, 7(1), 29-39.
- Skinner, B. F. (1957). *Verbal behavior*. New York: Appleton-Century-Crofts.
- Stearns, P. (2002). General education revisited, again. *Liberal Education*, 88 (1), 42-47.
- Stryker, S. (1968). Identity Salience and Role Performance: The Relevance of Symbolic Interaction Theory for Family Research. *Journal of Marriage and Family*, 30(4), 558-564. doi:10.2307/349494
- Tajfel, H & Turner, J.C. (1979). An Integrative Theory of Intergroup Conflict. *The social psychology of intergroup relations*. 33.
- Torneke, N. (2010). *Learning RFT*. Oakland, CA: New Harbinger Publications.

Turner, R. (1978) *The Role and the Person*. American Journal of Sociology 84(1), 1-23.
<https://doi.org/10.1086/226738>

Appendix A

Matching Questions

What was the name of your first grade teacher? (If you cannot remember the name of your first grade teacher, please put the name of your favorite grade school teacher).

What is the name of your childhood pet? (If you had no pet as a child, please put the name of the street you lived on as a child).

Demographics

Please indicate which course you are enrolled in:
(First-Year Seminar (FYS101); Honors First-Year Seminar (HN110); Honors 200 Level Class (HN200); Honors 300 Level Class (HN300))

Please indicate which FYS section you are enrolled in:
(options correspond to answer of previous question)

-OR-

Please indicate which Honors FYS (HN110) section you are enrolled in:
(options correspond to answer to previous question)

Please indicate which 200 level Honor's section you are enrolled in:
(options correspond to answer to previous question)

Please indicate which 300 level Honor's section you are enrolled in:
(options correspond to answer to previous question)

What is your gender?
(Male; Female; Prefer not to identify)

What is your year in school?
(1st year; 2nd year; 3rd year; 4th year; beyond 4th year)

About the course and how you learn

What do you hope to get out of this course? What things are you planning to do help you get the things you want out of it?

How do learn best? What promotes your learning and what makes learning more challenging?

Describe most significant learning experience.

About you

Do you consider yourself to be more extroverted or more introverted? What makes you feel that way?

How would you describe yourself as a student? How do you see yourself as a person?

Are you very judgmental about your past? How so / not?

Think of a recent time you had a problem to solve. Describe what you did to reach a solution.

Things you do

Describe your after class routine. Did you follow it yesterday? Why or Why not? What are some typical variations to your normal routine?

What did you do yesterday evening? Was it a typical evening for you? How would you describe your typical evening routine?

Sharing significant experiences from the last year Why was this event significant for you?

About your attitudes

Think of a unique behavioral attribute of yours. Describe how it is you feel that way?

Think about a recent text you sent. What did you mean by it?

What is important for you to do this semester?

Things that bother you

Think of the last thing that upset you. Did you notice your emotions? Did you act on them? Why or why not?

Do you ever overthink while trying to fall asleep? Do you try to calm your thoughts? Why or why not?

Think of your pet peeves. Why do these things bother you so much?