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Classification of Student Developed Annual Goals

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Classification of Student Developed Annual Goals

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Background

- There has been some research on how motivational processes relate to mastery and performance goals in actual classroom settings (Elliott & Dweck, 1988). (1)
- Recent research has focused on how motivational processes affect the goals. However, there is limited information about types of student developed goals. Notably classification as personal, professional, long, and short term goals.
- This study provides an insight into student developed goals.

Objective

This study aims to categorize annual goals (personal vs professional and long vs short-term) throughout the years of PharmD students at a direct entry private university.

Methods

- All pharmacy students at ONU are required to complete an annual goal setting assignment in the fall where students develop their personal/professional goals for academic year. Pre-existing data were used for this project. This research project was approved by the ONU IRB.
- Definitions were determined goals classification (personal vs professional and long vs short term). A beta-test was conducted by principal investigator and responsible investigator confirm definitions were consistently interpreted between raters. At initial review there was an 84% match in cateogrization. Definitions were further refined by discussion. Final definitions are provided below in the Figure 1.
- Once definitions were confirmed the student developed goals were categorized first by the principle investigator. A second investigator randomly categorized a sample of goals for validity.
- Multiple one-tail Z-tests with Bonferroni correction were used to compare the proportion of personal/professional and short-term/long-term goals for P1 students to the proportion of each of the classes (P2-P5) for the years of 2018 and 2019, respectively.
- Multiple one-tail Z-tests with Bonferroni correction were also used to compare the proportion of personal/professional and short-term/long-term goals for P1-P4 in the year 2018 to their P2-P5 proportion in the year 2019.

Methods (continued)

Table 1: Student goal type and definition

Goal	Characteristic	Example
Long term	Require at least 12 months to complete, involve the completion of smaller goals first	"Discover different aspects of what pharmacists do and potentially decide what I want to pursue my career in".
Short term	Straightforward, require a short period of time/ effort	"I want to find and complete the best planner/calendar that I can utilize to keep track of what's going on in all of my classes".
Personal	Personal life-related, self-confidence, self-motivation	"Join a non-pharmacy specific organization, sport, or Greek life".
Professional	Education and career related, required for one's academic success	"Develop my pharmacy knowledge in multiple fields such as CNS, diet, and chemotherapy".

Results

- The study sample consisted of 2190 and 1884 goals which were classified into short-term/long-term and personal/professional in 2018 and 2019 respectively.

2018 Pharmacy Candidates

2019 Pharmacy Candidates

Results (continued)

Figure 1. Change of Proportion of Personal/Professional Goals Across Years

Proportion of Personal Goals
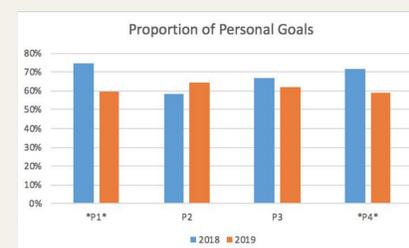
"*" indicates the change in proportions from 2018 to 2019 were statistically significant, p<0.01

Figure 2. Change of Proportion of Short-Term/Long-Term Goals

Proportion of Short-Term Goals

"*" indicates the change in proportion from 2018 to 2019 were statistically significant, p<0.01

Figure 3. Comparison of Proportion of Personal/Professional Goals Between P1 and Comparison Cohorts for 2018

Year	P1 Proportion	Comparison Cohort	Proportion	P-value
2018	0.7442[1]	P2	0.5837	0.0000***[2]
		P3	0.6667	0.0060**
		P4	0.7158	0.2004
		P5	0.6376	0.0003***

1. The proportion of personal goals among all the goals (personal and professional) among all respondents for the year.
2. ***: significant at 0.01 after Bonferroni correction for multiple testing, **: significant at 0.05 after Bonferroni correction for multiple testing, *: significant at 0.1 after Bonferroni correction for multiple testing.

Figure 4. Comparison of Proportion of Personal/Professional Goals Between P1 and Comparison Cohorts for 2019

Year	P1 Proportion	Comparison Cohort	Proportion	P-value
2019	0.8535[1]	P2	0.5982	0.0000***[2]
		P3	0.6425	0.0000***
		P4	0.6189	0.0000***
		P5	0.5873	0.0000***

1. The proportion of personal goals among all the goals (personal and professional) among all respondents for the year.
2. ***: significant at 0.01 after Bonferroni correction for multiple testing, **: significant at 0.05 after Bonferroni correction for multiple testing, *: significant at 0.1 after Bonferroni correction for multiple testing.

Results (continued)

Figure 5. Comparison of the Proportion of Short/Long Goals Between P1 and Comparison Cohorts for 2018

Year	P1 Proportion	Comparison Cohort	Proportion	P-value
2018	0.9182[1]	P2	0.9009	0.2091[2]
		P3	0.8675	0.0082**
		P4	0.7956	0.0000***
		P5	0.7449	0.0000***

1. The proportion of short-term goals among all the goals (short- and long-term) among all respondents for the year.
2. ***: significant at 0.01 after Bonferroni correction for multiple testing, **: significant at 0.05 after Bonferroni correction for multiple testing, *: significant at 0.1 after Bonferroni correction for multiple testing.

Figure 6. Comparison of the Proportion of Short/Long Goals Between P1 and Comparison Cohorts for 2019

Year	P1 Proportion	Comparison Cohort	Proportion	P-value
2019	0.8650[1]	P2	0.9468	1.0000[2]
		P3	0.8898	0.6368
		P4	0.8036	0.0165*
		P5	0.8157	0.0496

1. The proportion of short-term goals among all the goals (short- and long-term) among all respondents for the year.
2. ***: significant at 0.01 after Bonferroni correction for multiple testing, **: significant at 0.05 after Bonferroni correction for multiple testing, *: significant at 0.1 after Bonferroni correction for multiple testing.

Conclusion & Implication

- As students progress through the program, self-developed goals are more likely to be professional and long-term goals.
- Recognition of difference in goals could aid the College in providing differentiated support for student achievement of their goals at different points in the program. This could better optimize resource allocation to match student needs.
- Recognition of varied types of goals will help to shape future assignments like this within the College of Pharmacy.

References

1. Elliott ES, Dweck CS. Goals: An approach to motivation and achievement. J Pers Soc Psychol. 1988;54(1):5–12.