

RESEARCH

Well-Being Content Inclusion in Pharmacy Education Across the US and Canada

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Objective. To describe the landscape of Well-Being (WB) content inclusion across schools and colleges of pharmacy (S/COP) in the United States (U.S.) and Canada through identification of content implementation, incorporation, and assessment.

Methods. A cross-sectional survey was distributed to all accredited S/COP in the U.S. (n=143) and Canada (n=10). Survey questions included curricular and co-curricular timing, frequency, assessment strategies and support for WB initiatives, using a framework of eight dimensions (pillars) of wellness to categorize content.

Results. Descriptive data analyses were applied to 99 completed surveys (65%), 89 (62%) in the U.S. and 10 (100%) in Canada. WB content was most prevalent within the co-curricular realm and incorporated into didactic and elective more than experiential curricula. Most content came from intellectual, emotional, and physical pillars, and least from financial, spiritual, and environmental pillars. Less than 50% of S/COP include WB within their strategic plans or core values. Funding is primarily at the University (59%) or S/COP (59%) levels. Almost half of respondents reported inclusion of some assessment, with a need for more training, expertise, and standardization.

Conclusion. Survey results revealed a wide range of implementation and assessment of WB programs across the U.S. and Canada. These results provide a reference point for the state of WB programs that can serve as a call to action and research across the Academy.

INTRODUCTION

Well-being (WB) is defined as an optimal and dynamic state allowing people to achieve their full potential, while “wellness” is the quality or state of being in good health.^{1,2} Healthcare professionals face significant WB challenges, and these difficulties begin among healthcare professional trainees.³⁻⁶ Facets of WB, specifically emotional health, lead to greater self-efficacy in accomplishing academic goals.⁷⁻¹⁰ Existing literature outlines approaches such as stress reduction education used by schools and colleges of pharmacy (S/COP) to improve WB within their curricula and healthcare settings.^{11,12}

In 2019, several pharmacy organizations convened to develop strategic actionable recommendations to improve WB within the profession as outlined in the Enhancing WB and Resiliency Among the Pharmacist Workforce: A National Consensus Conference.¹³ Eleven out of 50 recommendations specifically related to academia. As a result, in 2020, the American Association of Colleges of Pharmacy (AACP) Well-Being and Resiliency Community (WBRC) was formed to promote WB education, initiatives, and assessment within pharmacy academia.

Despite dedicated conversations on a national level for a systems approach to WB, there is a paucity of literature regarding the current state of WB efforts within S/COP.¹⁴ The objective of this study was to describe WB content, implementation, and assessment across all S/COP in the United States (U.S.) and Canada.

METHODS

The WBRC convened a workgroup with participants from the U.S. and Canada to develop a survey and gather data regarding current WB efforts. The workgroup divided into subgroups for each of ten potential survey sections, and formulated questions. The WB and wellness framework utilized in the survey was adapted from the Substance Abuse and Mental Health Services Administration’s eight pillars of wellness as the most inclusive way to categorize WB content.¹⁵ Pillar definitions and examples were included as an appendix to provide clarity to survey participants, based on expert opinion, experience, and extant literature.

The survey was delivered with companion documents of: (1) the appendix of WB pillar definitions and examples, and (2) a word document of the survey to allow respondents the opportunity to identify and gather the necessary information before survey completion.

Given the large scope of the project, the survey was divided into three sub-surveys: (1) curriculum overview, (2) experiential education, and (3) faculty development. The surveys and companion documents were tested for face and content validity by examining readability, ease, navigation, and clarity by seven WBRC members prior to dissemination.

Only the curriculum overview sub-survey will be described in this manuscript. This survey contained the following six sections: 1) Demographics (12 items), 2) Faculty/Staff Involvement and Resources (4 items): personnel, dedicated faculty/staff, and advanced credentials, 3) Program Resources (4 items): institutional support for self-care WB programs, funding sources, inclusion in strategic plan/core values, 4) Curricular and Co-Curricular Content (19 items): overall program inclusion (2 items), specific topic inclusion by pillar (8 items), place, timing, and delivery methods for each pillar (8 items); certificate training (1 item), 5) Assessment Strategies (2 items): tool, frequency and type, and 6) WB support and potential barriers (1 table, 15 items): 5-point Likert scale of Strongly Disagree to Strongly Agree including “Unable to Rate”.

The three sub-surveys were distributed via email to WB representatives, identified from AACP resources and self-identification from the AACP WBRC, at 143 U.S. and 10 Canadian pharmacy programs (153 total) with a link to the survey in Qualtrics (Provo, Utah). The survey was approved as exempt by the Concordia University Wisconsin Institutional Review Board (IRB) and the Research Ethics Board at the University of Alberta (Study ID: PRO 00106961). Data collection began in December 2020, with monthly reminders to non-responders through April 2021.

Statistical Analysis

All statistical analyses were conducted using SPSS Statistics (version 27, IBM Corp, Armonk, NY). Data from Canadian institutions, (all four-year programs), were analyzed with the U.S. four-year program data. Descriptive analyses were used to summarize data for categorical and continuous variables. Student t-test or Chi-square was used to analyze continuous and categorical data, respectively. A Fisher’s exact test was used to compare U.S. and Canadian data with categorical variables. For all tests of significance, a two-tailed alpha value was set at .05.

RESULTS

A total of 99 completed surveys were analyzed out of 153 invited programs (65%) after removing five duplicates. Of these, 89 (62%) were from the U.S. and 10 (100%) from Canada. There were no significant differences between U.S. and

Canadian S/COP. Most participating U.S. institutions (96%) and all Canadian S/COP were accredited. The majority of S/COP (58%) were older than 25 years and on a single campus (77%). Over half of participating institutions were public (58% U.S. and 100% Canadian), 42% private, and 1% public or private historically black colleges and universities. Most of the responding schools had four-year programs (80%) and a Doctor of Pharmacy class size between 51-150 students. Prior to the COVID-19 pandemic, 90% of programs offered all-in-person curricular delivery. During the COVID-19 pandemic, most (80%) programs moved to a hybrid remote and in-person delivery, with 60% delivering remote teaching synchronously. WB activities were included in less than half of the strategic plans and core values of universities (30%) and S/COPs (41%), or in department goals (24%). Institution descriptors are available in Table 1.

Nearly all respondents indicated their schools had some form of co-curricular initiatives related to WB. When asked to indicate all possible initiatives, 95% of respondents reported student-driven initiatives, 81% included staff-directed initiatives, and 66% reported using on-demand/asynchronous workshops. About 42% of respondents indicated co-curricular initiatives occurred at least two to four times/year.

Although the inclusion of WB activities within the pharmacy curricula varied, the majority (90%) reported WB content offered through the university-at-large. Within S/COPs, content was most frequently integrated within electives (>50%) for three and four-year programs. Common didactic areas for WB content included required courses, stand-alone courses, longitudinal course series, and integration across multiple courses. Focused experiential (from the curricular overview survey) was the area with the least inclusion. See Figure 1 for a breakdown by three-year, four-year, and six-year program data. Three-year programs reported more WB content in electives and longitudinal course series than within required didactics. Six-year programs reported the least curricular incorporation with zero inclusion within integrated courses, longitudinal course series, focused experiential, or interprofessional educational (IPE) activities. Within four-year programs, the largest cohort, the first professional year (PY1) included WB content in didactic courses and focused IPE activities (~35%). The PY2 and PY3 years offered most elective WB content (~48%).

Most S/COP indicated they did not offer any WB certificate training programs. When offered, Mental Health First Aid training was the most common (31%), followed by QPR Gatekeeper Training for Suicide Prevention (21%), JED Foundation (8%), and State/Provincial Board of Pharmacy Training Programs (7%).^{16, 17} Most were delivered via co-curricular experiences (33%) and elective courses (20%). Four-year programs had a higher number of certificate trainings offered, mostly (42%) in the PY3.

Based on the total number of specific topics offered, averages across the curriculum for all pillars are represented from highest to lowest in Table 2. The didactic and elective curriculum included the same top pillars with slight variations in rank: intellectual, emotional, physical, occupational, and social. The least represented in any area of the curriculum were financial, spiritual, and environmental (<20%). The top WB topics within each pillar covered by >60% respondents included self-awareness (75%), self-care (68%), critical reflection (67%), diversity and inclusion of minority students (63%) and stress management (63%). See Appendix 1 for specific percentages across each topic. Canadian schools had a statistically significant lower financial inclusion with no need to cover student loan payback planning. Experiential WB content was limited overall, with intellectual (17%) being the most covered pillar (Figure 2). In the four-year programs (N=79), WB content was included in 7% of Introductory Pharmacy Practice Experiences (IPPE) and 18% of Advanced Pharmacy Practice Experiences (APPE). In three-year programs (N=10), three schools reported APPE inclusion and two within IPPEs. No six-year programs (N=10) reported WB in experiential.

Approximately 50% of surveyed programs reported using tools to assess WB. Of those, 17% completed these assessments once overall, 37% annually, 34% several times throughout the program, and 12% twice annually. Eighty one percent of programs completed assessments in the didactic years versus 19% in the experiential year. Among these S/COP, the most assessed topics were perceived stress (n=57) and overall WB (n=50). S/COP reported using the following validated assessments: Maslach Burnout Inventory, My WB Index, DISC Assessment, Strength Finder, Perceived Stress Scale (PSS), Duckworth Grit Scale, and AACP Graduating Student Survey. Other respondents reported using internally developed tools to assess a variety of WB topics (e.g., overall WB, perceived stress, coping strategies, mindfulness, and intellectual wellness).

Resources and Potential Barriers

Thirty seven percent reported having a dedicated person or committee/working group to oversee all student WB initiatives. (Table 1) The dedicated person varied between administrators, faculty, and staff. Committee/groups included faculty (92%), staff (82%), and students (77%), and met monthly (49%) or as needed (36%). Over half (58%) reported personnel participating in WB initiatives out of goodwill, volunteering, or self-directed efforts. Although 78% of S/COP reported having personnel with credentials related to WB (e.g., wellness certified, Mental Health First Aid, lifestyle medicine), approximately one-third of respondents indicated that their dedicated WB person did not have specific WB credentials. Credentials held by committee members included mental/behavioral health (48%), yoga instructor (21%), and

a national credential of board certification in psychiatric pharmacy (BCPP) (38%). While the BCPP credential signifies expertise in psychiatric pharmacy, BCPPs also support optimizing mental and emotional health overall.

Most (74%) institutions provided support or counseling programs separate from health coverage policies or Employee Assistance Programs. Nearly all programs (93%) offered institution-level counseling programs for students, where a large majority (>80%) offered WB education and exercise programs (access to gyms, vouchers for decreased gym membership fees), and over half (56%) offered time-out options (e.g., quiet spaces, walking trails). For faculty and staff, the top three WB programs offered at the institution level were education programs about wellness/maintaining WB (77%), exercise programs (74%), and counseling programs (63%). Other notable offerings included time out options (50%), health programs such as annual physician evaluations (47%) and hydration programs (40%).

University (59%) and S/COP (59%) resources were the most common primary funding sources for WB activities, along with student fees (28%). Numbers were similar between public and private institutions. Grant funding from internal (3%) and external (5%) sources was reported as available yet not utilized and could be viable opportunities for future consideration.

Based on a 5-point Likert scale, 71% of respondents strongly/agreed their institution has an overall culture of WB; including role models to help others learn (69%) and/or a dedicated champion to lead initiatives (52%). (Table 3) In addition, 47% reported widespread interest amongst faculty, with 56% having access to training in general and 54% reporting access to experts for training. Although 73% strongly/agreed they have leadership support, only 61% had central administration support from the university-at-large and less than half (45%) reported faculty/staff involvement being recognized as service to the college.

Over half of surveyed programs (58%) did not have adequate space or curricular time; 39% did not have trained personnel to teach these initiatives nor a defined leadership team to help direct these initiatives (32%) or collaborative student interest (32.9%). Financial support for wellness initiatives was reported by only 27% of respondents (strongly/agreed), while another 41% strongly/disagreed to having this support.

DISCUSSION

Approaches to prioritization, implementation, and assessment of WB initiatives vary across S/COPs in the U.S. and Canada. There is a need to address barriers to providing quality WB initiatives consistently across didactic, experiential, and co-curriculums. In addition, WB initiatives need to be enhanced and assessed at both a university and S/COP level. The findings in this study confirm results of a study by Folz and colleagues, which reported prevalence of wellness programs at U.S. S/COP.¹⁸ Both surveys included a similar and representative sampling of private and public institutions with consistency in class size amongst S/COP (50-100 students). The current study had a higher response rate overall (32% vs 65%).

Folz and colleagues utilized six dimensions of wellness (environmental and financial were not assessed), while this study specified eight.¹⁹ Similar to our study, Folz found high inclusions of the intellectual, emotional, physical and social pillars, whereas spiritual pillar was less incorporated.¹⁹ The intellectual domain topics included observable and measurable behaviors such as self-awareness, self-reflection, mindfulness, mindset, and meditation. Similarly, the emotional pillar included measurable variables such as self-care, stress management, emotional intelligence, and personality inventory. Occupational wellness was ranked higher in our results, possibly reflecting the shift of focus to workload and burnout during the COVID-19 pandemic. In addition, social activities received increased attention potentially due to health disparities emphasized by the number of growing social movements and awareness. The evolution of social change makes it timely for pharmacy education to continue to expand diversity and inclusion of minority and LGBTQ+ students and build community connections. Both occupational and social activities have been included within organizational strategies to reduce burnout.²⁰ Both surveys found most WB content being taught/applied in the co-curriculum, while experiential training had the least amount of WB content. Limited WB content offerings in experiential training highlights the need for more attention and development in programs as stress levels encountered by students in experiential learning environments are similarly encountered in residency training, with results showing higher depression, hostility, and dysphoria observed in residents.²¹⁻²³ Both areas could serve as a starting point for programs to consider.

Assessment of WB pillars and topics were variable across S/COP with a lack of standardization. Most reporting programs completed assessments multiple times throughout student academic progression, though only one-half reported using specific WB assessments. Challenges exist regarding WB assessments including time, survey fatigue, perception of lesser importance than curricular therapeutic/science topics, and cost to program of accessing and administering multiple validated tools. While there is the caveat that components of WB need time and practice to identify measurable change, conversely, assessment is needed to determine the success of programs, and all stakeholders including faculty, staff and students should be included. A balanced, intentional approach is best suited for assessment of WB topics, which aligns

with recommendations from the Accreditation Council for Pharmacy Education and the National Academy of Medicine (NAM).^{13,14}

In addition, NAM recommends a systems approach to professional WB, specifically enacting change in health professional learning environments to mitigate burnout, enhance WB, and reduce stigma.¹⁴ In order to enact meaningful change, there needs to be programmatic support from an organizational level. Data suggests that organizational priorities and programmatic changes positively impact student mental health and wellness.²³⁻²⁵ Our study indicated that less than half of universities, S/COP, and departments include WB activities as part of their strategic plans and/or core values. When WB is prioritized as an organizational commitment, opportunities to address personnel, time, and financial resource allocation become more feasible.²⁶

To enact a systems approach to WB, large-scale organization and programmatic level changes appear necessary. Additionally, limited dedicated personnel for WB programs compels faculty and staff participating out of good will. To prioritize WB, S/COP could consider reevaluating workload and promotion criteria to encourage faculty to enact WB initiatives. The large presence of university-level WB programs could be helpful in alleviating some of the aforementioned barriers of personnel, time, and funding at the S/COP. Finally, there are gaps in optimal assessment and improvement of WB programs. Useful practices for assessing WB programs could be identified to support S/COP to make informed decisions regarding the quality and quantity of WB initiatives to ensure strategic goals are met.

Study results need to be viewed considering known limitations of survey research. First, the length of this survey, including the breadth and depth, may have led to survey fatigue and a risk of inadequate reporting across all areas of the curriculum. Second, survey data was collected during the early COVID-19 pandemic, which may not reflect changes made later in response to the pandemic. Finally, there may have been over or underreporting of WB content by respondents due to social desirability bias or limited access or knowledge of current initiatives. As a point of clarification, this manuscript reported experiential data gathered from the curricular overview survey. More data will be forthcoming from the separate experiential sub-survey.

Future Directions

With a better understanding of the current state of WB programs, there are opportunities to further expand, refine, and evaluate WB initiatives across the Academy. These results note that the majority of participating S/COP have some WB initiatives, yet there is still much to be done in creating inclusive learning environments that positively impact the WB of the future pharmacy trainees. Additionally, differences in WB implementation based on program length can be further delineated.

The results of this survey can serve as a baseline of WB initiatives and motivation to enhance WB programs across the country. These findings can help WB advocates and leaders self-assess current initiatives, model inventories, content coverage, and types of assessments in comparison with other programs. For some, this means first-time implementation or significant overhaul. For others, the results may affirm what they are already doing. S/COP need to prioritize WB initiatives in their strategic plans and allocate resources (e.g., funds, personnel, and time) to enhance implementation and assessment. Other considerations may include new faculty and/or staff hires and workload redistribution.

Additionally, this report serves as a call to action for the Academy. Recent inclusion of WB initiatives within the 2021-2024 AACP strategic priorities (Strategic Priority #4: Achieving WB for All) is a step in the right direction.²⁷ Continued emphasis and providing faculty and staff with training and resources are necessary to enable S/COP to achieve these priorities. There are also opportunities to learn from other health care profession academies that report successful WB outcomes as they continue to emerge.^{11,12,25}

Lastly, this study opens the door for future research and collaboration. There is a paucity of literature regarding the results of the various WB assessments being done across S/COPs that can stimulate quality improvement of current initiatives. We can partner together to identify WB best practices and determine strategies to overcome barriers.

CONCLUSION

This large-scale assessment of WB programs in S/COP provides a broad overview of WB initiative implementation across the U.S. and Canada; however, barriers to implementation and assessment have been identified. Influential factors to consider that can promote WB among our learners include infrastructure resources, frequency and depth of WB content coverage, measures of assessment, and sustainability. This survey provides a reference for the state of WB programs that can be monitored over time. These results represent a call-to-action and research across the Academy.

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Table 1. Demographics, Personnel Engagement, and Funding Sources of Responding Schools

	All S/COP, N=99 (%)	Public U.S. Programs, N=47 (%)	Private U.S. Programs, N=42 (%)	Canadian Programs*, N=10 (%)
<i>Program length</i>				
3-years	10 (10)	1 (2)	9 (21)	0 (0)
4-years	79 (80)	42 (89)	27 (64)	10 (100)
6-years	10 (10)	4 (9)	6 (14)	0 (0)
<i>Annual student enrollment</i>				
<50	11 (11)	3 (6)	7 (17)	1 (10)
51-100	44 (44)	18 (38)	23 (55)	3 (30)
101-150	31 (31)	21 (45)	8 (20)	2 (20)
>151	12 (12)	4 (9)	4 (10)	4 (40)
<i>Age of school</i>				
≤ 5 years	5 (5)	2 (4)	3 (7)	0 (0)
6-10 years	18 (18)	5 (11)	13 (31)	0 (0)
11-25 years	19 (19)	4 (8)	13 (31)	2 (20)
> 25 years	57 (58)	36 (77)	13 (31)	8 (80)
<i>Campus design (single campus)</i>	76 (77)	30 (64)	37 (88)	9 (90)
<i>Faith-based</i>	20 (20)	0 (0)	20 (48)	0 (0)
<i>Personnel engagement</i>				
Dedicated person for oversight of student WB initiatives	36 (37)	19 (40)	13 (31)	4 (40)
Dedicated student WB committee/working group	37 (37)	19 (40)	15 (36)	3 (30)
Staff/faculty with formal credentials related to student WB	76 (77)	36 (77)	33 (79)	7 (70)
<i>Funding source for WB activities</i>				
University resources	58 (59)	27 (57)	23 (55)	8 (80)
School/college resources	58 (59)	26 (55)	25 (60)	7 (70)
Student fees	28 (28)	16 (34)	7 (17)	5 (50)

*All Canadian Programs are Public; Abbreviations: S/COP=schools and colleges of pharmacy; WB=well-being^a Participants responded to questionnaire items using the following five-point Likert scale: 5 strongly agree, 4 agree, 3 neutral, 2 disagree, 1 strongly

Table 2. Specific Well-being Topic Frequency of Inclusion by Pillar

Pillar	Overall Frequency (Average* %)	Reported Topic Inclusion		
		Covered at > 40% of Institutions	Covered at 20-39% of Institutions	Covered at < 20% of Institutions
Intellectual	34	Self-awareness; Critical reflection; Mindfulness; Mindset	Core values; Meditation; Grit; Gratitude Neuroscience and wellness	Memory enhancing games; Internal narrative; Breathing
Emotional	32	Self-care; Stress management; Emotional intelligence; Personality inventory	Self-compassion; Kindness; Coping; Imposter syndrome Identification of purpose	Perfectionism
Physical	30	Exercise/physical activity; Sleep hygiene; Nutrition/dietary; Meditation	Preventative medicine; Yoga	Aromatherapy; Biofeedback; Heart math; Medication safety
Occupational	28	Resiliency; Burnout prevention; Balance	Project management; Procrastination	Personal safety; Essentialism; Bullying; Second victim training; Assisting students in distress
Social	26	D/I Minority students; Building community connection; D/I LGBTQA+ students	Community support groups; D/I Indigenous students; D/I First generation students	Unplugging and meaningful conversations
Financial	19	Dealing with student loans; Budgeting	Managing money; Developing financial goals Saving money; Retirement planning	Investing
Spiritual	19		Acts of service; Incorporation into patient care courses; Meditation; Exploration of values/beliefs; Gatherings and services	Traditions, Prayers; Personal practices; Fasting
Environmental	12		Community improvement; Recycling	Organizing space; Making positive environmental impact; Decluttering; Eco-conscious living; Energy conservation

*Average calculated from total coverage within didactic, elective, experiential and co-curricular

Abbreviations: D/I = Diversity and Inclusion; LGBTQA+ = Lesbian, Gay, Bisexual, Transgender, Queer, Questioning, Asexual, Ally + Other Identities

Table 3. Responses to the Survey Questionnaire on “Culture of Well-being Support and Barriers at US and Canadian Schools/Colleges of Pharmacy”^a

Survey Questionnaire Statement ⁺	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)	Mean (SD) [*]
Our program has leadership support [#]	36.5	37.6	18.8	3.5	1.2	4.1 (0.9)
Our program has central administration support from the university at-large [§]	24.4	37.2	20.9	4.7	5.8	3.9 (1.2)
Our school/college has an overall culture of WB support [§]	22.1	48	15.1	10.5	3.5	3.8 (1.0)
The faculty and staff have access to training regarding WB [#]	21.2	34.1	20.0	18.8	3.5	3.6 (1.2)
Our program has access to experts who help train our faculty and staff on WB initiatives [#]	21.2	32.9	15.3	22.4	5.9	3.5 (1.3)
Faculty/staff involvement in mental health and WB committee work is recognized as service to the college [#]	21.2	24.7	23.5	20.0	4.7	3.6 (1.3)
Our program has role models to help others learn WB [§]	20.9	48.8	16.3	10.5	1.2	3.9 (1.0)
Our program has a dedicated champion to lead initiatives [§]	16.3	36.0	22.1	17.4	4.7	3.5 (1.2)
Our program has a defined leadership team to help direct these initiatives [§]	12.9	20.0	23.5	31.8	8.2	3.1 (1.3)
Our program has trained personnel to teach these initiatives [†]	10.7	17.9	29.8	32.1	6.0	3 (1.2)
There is wide-spread interest amongst faculty [#]	7.1	38.8	28.2	17.6	4.7	3.4 (1.1)
Our program has good financial support for these initiatives [§]	5.8	20.9	27.9	30.2	10.5	3 (1.2)
Our program has collaborative student interest [#]	3.5	29.4	44.7	12.9	9.4	4.1 (1.0)
There is adequate space/time in our curriculum [#]	2.4	17.6	21.2	47.1	10.6	2.6 (1.0)
Religious views are a source of conflict regarding choices/inclusion for wellness programs [#]	0	2.4	14.1	34.1	36.5	2.3 (1.6)

^a Participants responded to questionnaire items using the following five-point Likert scale: 5 strongly agree, 4 agree, 3 neutral, 2 disagree, 1 strongly disagree

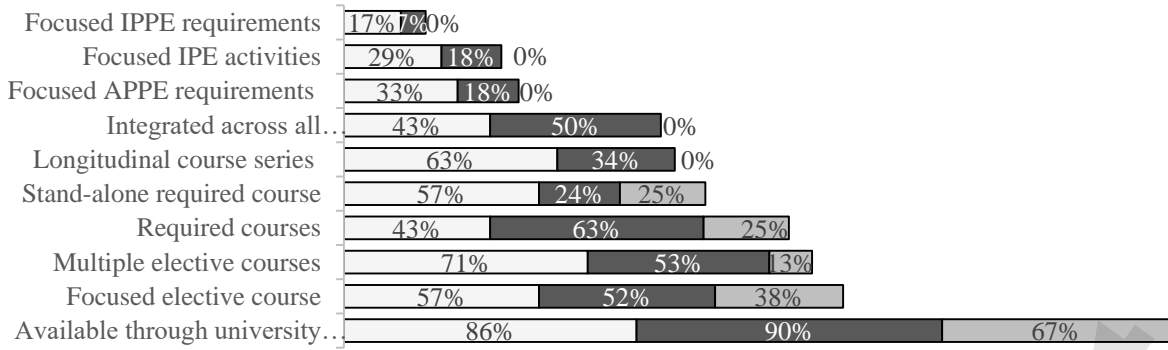
⁺ Responses do not add up to 100% as some respondents unable to rate: [†] responses from 84 programs; [#] responses from 85 programs; [§] responses from 86 programs

^{*} Higher mean values indicate greater level of agreement

Abbreviations: WB=well-being; SD=standard deviation

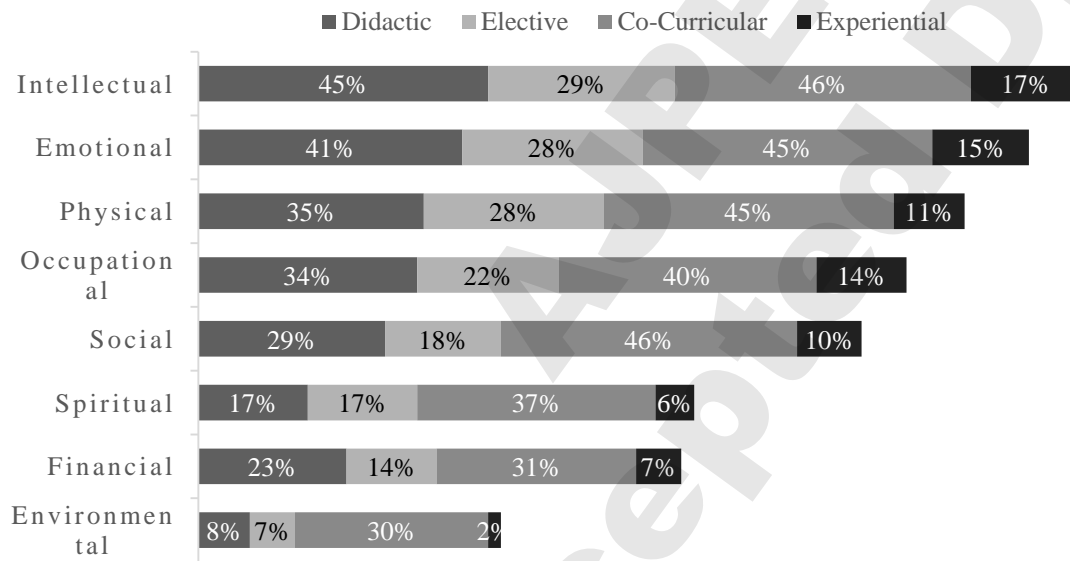
Figure 1. Curricular Inclusion of Well-Being Content by Program

□ 3 year programs: N = 10 ■ 4 year programs: N = 79 ▒ 6 year programs: N= 10



Abbreviations: APPE=advanced pharmacy practice experiences; IPE=interprofessional experiences; IPPE=introductory practice experiences

Figure 2. Curricular Inclusion of Pillars: What is Covered and Where



Appendix 1. Inclusion of Well-Being Content by Pillars and Topic*

Pillars 1-4	Topic	Frequency of Inclusion (%)	
Intellectual	Self-Awareness	75	
	Critical Reflection	67	
	Mindfulness	57	
	Mindset	45	
	Core Values	39	
	Medication	39	
	Grit	33	
	Gratitude	30	
	Neuroscience and Wellness	29	
	Memory Enhancing Games	9	
	None	3	
	Other: Internal Narrative, Breathing	2	
	Emotional	Self-Care	68
Stress Management		63	
Emotional Intelligence		60	
Personality Inventory		49	
Self-Compassion		35	
Kindness		35	
Coping		35	
Imposter Syndrome		33	
Identification of Purpose		22	
Perfectionism		19	
None		3	
Occupational	Resiliency	60	
	Burnout Prevention	57	
	Balance	46	
	Project Management	33	
	Procrastination	29	
	Personal Safety	18	
	Essentialism	7	
	Bullying	6	
	None	6	
	Second Victim Training	2	
	Other: Assisting Students in Distress	1	
	Physical	Exercise / Physical Activity	56
		Sleep Hygiene	54
Nutrition / Dietary		47	
Meditation		45	
Preventative Medicine		31	
Yoga		30	
Aromatherapy		10	
None		7	
Biofeedback		5	
Heart Math		5	
Other: Med Safety	4		

* Data from 99 programs

Appendix 1 cont. Inclusion of Well-Being Content by Pillars and Topic*

Pillars 5-8	Topic	Frequency of Inclusion (%)	
Social	D&I of Minority Students	63	
	Building Community Connection	60	
	D&I of LGBTQ+ Students	54	
	Support Groups in the Community	37	
	D&I of Indigenous Students	36	
	D&I of First-Generation College Students	33	
	None	5	
	Other: Unplugging and Meaningful Conversations	1	
	Spiritual	Acts of Service	35
		Incorporation into Patient Care	30
Meditation		29	
Exploration of Values / Beliefs		27	
Gatherings / Services		20	
Traditions		18	
Prayer		17	
Personal Practices		14	
None		8	
Fasting		5	
Financial	Dealing with Student Loans	60	
	Budgeting	40	
	Managing Money	39	
	Developing Financial Goals	39	
	Saving Money	24	
	Retirement Planning	21	
	Investment Strategies	17	
	None	14	
	Other: Unsure	1	
	Environmental	Community Improvement	30
Recycling		21	
None		21	
Organizing Space		10	
Making Positive Environmental Impact		7	
Decreasing Clutter		6	
Eco-Conscious Living		6	
Energy Conservation		4	
Other		1	

* Data from 99 programs

D&I = Diversity and Inclusion; LGBTQ+ = Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, and Others

