

AACP Education-Occupation Indicator in PharmCAS Webinar

Jennifer L. Adams, PharmD, EdD, FAPhA
adamjen1@isu.edu

Learning Objectives

- Discuss the intrinsic value of SES as a holistic admissions criterion in health professions education.
- Describe the research conducted in the development of a pharmacy-specific EO indicator.
- Review the EO indicator calculation rules for PharmCAS.
- Interpret and incorporate the EO indicator into the local, pharmacy admissions process.
- Access and export the EO indicator data in WebAdMIT. [*PharmCAS Staff*]

Why is Socioeconomic Status Important in Admissions?

- ACPE Standards 2016
- Achieving diversity goals
- Distance traveled
- Health equity



Equality

doesn't mean

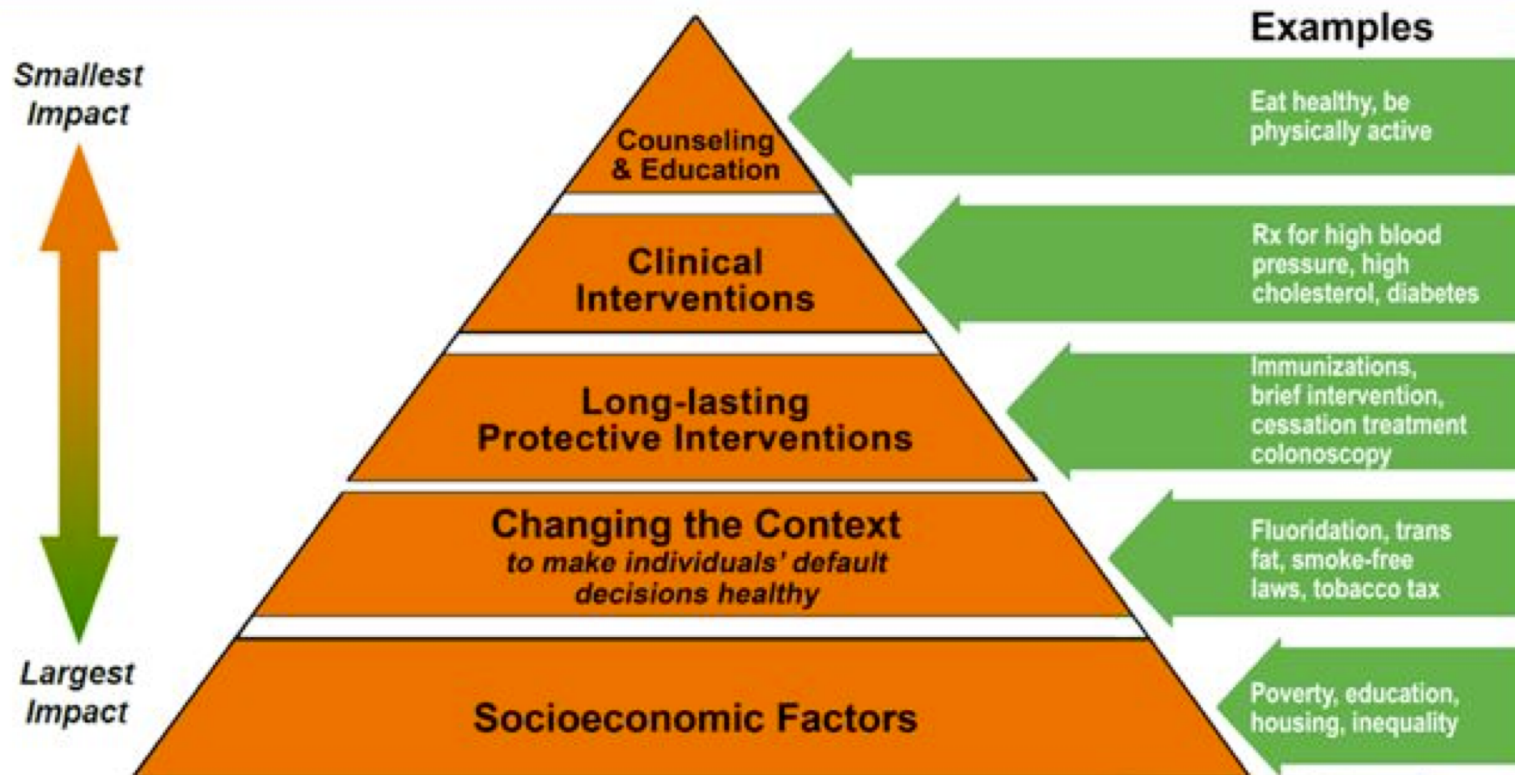


Equity

source: Lincoln County, WI Health Department

CDC Health Impact Pyramid

Factors that Affect Health



Check the Tarrant County Public Health Web site to learn more.
<http://health.tarrantcounty.com>



ACHIEVING HEALTH & MENTAL HEALTH
EQUITY AT EVERY LEVEL

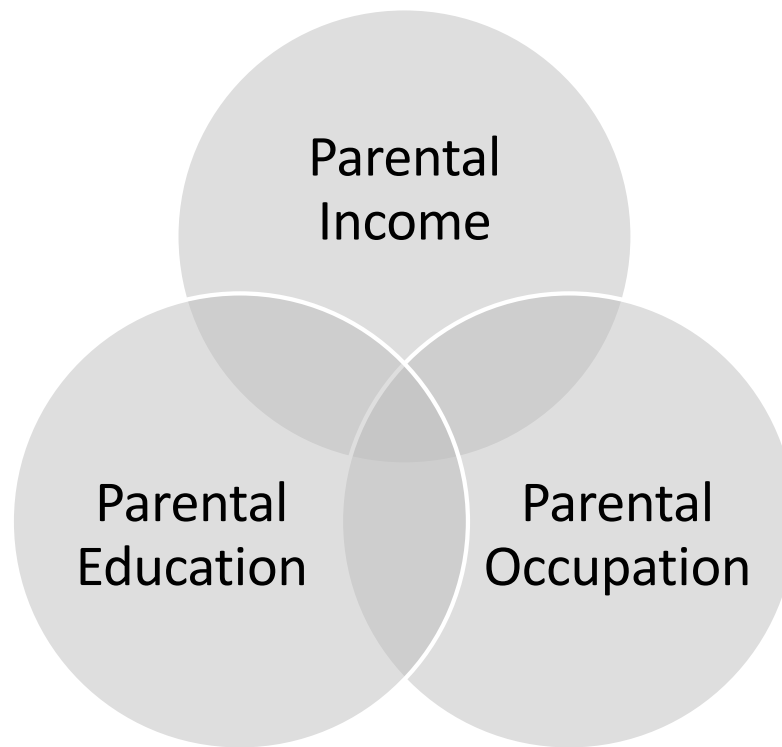
Transforming the conditions in which people are
BORN, GROW, LIVE, WORK and AGE
for optimal health, mental health & well-being.



source: Let's Get Healthy California



Components of SES



Research Goal

- Provide an additional tool to help schools identify academically competitive lower socioeconomic status applicants
- Help schools achieve core diversity goals

Methods

- 2012 – 2013 and 2015 – 2016 applicant data
- Surrogate Markers for SES:
 - Parental Education
 - Parental Occupation
 - Two Factor Index for Social Position by Hollingshead and Redlich
 - Used by ADEA and AAMC
- EO Indicator
- Correlation and Regression Models

Point Value	Parent Education	Parent Occupation
1	High School Degree or Less	Service, Clerical, Skilled, Unskilled Labor or Enlisted Military member
2	Some College Technical School or Completed an Associate Degree	Executive, Professional, Managerial, Military Officer, or Business Owner
3	Completed a Bachelor Degree	
4	Completed a Professional Degree (e.g. Law, Medicine, Pharmacy or Graduate Degree (Masters or Doctorate)	
0	Unable to determine or do not know	Unable to determine or do not know

EDUCATION**OCCUPATION**

	Executive, managerial (2 Points)	Service, clerical, skilled and unskilled labor (1 point)
Professional or Graduate degree (4 points)	EO-6	EO-5
Bachelor's degree (3 Points)	EO-5	EO-4
Some College, Tech or Associate's Degree (2 Points)	EO-4	EO-3
High School Degree or Less (1 Point)	EO-3	EO-2

Individual Parent EO Score	Combined EO Score for 2 Parents	Combined EO Score for 3 Parents	Combined EO Score for All Parents based on information submitted for all 4 parents	Family SES Meaning	Annual Family Household Income for 4 Persons in 2017 \$ *Not adjusting for regional variation or male or female wage earners
EO 6	11-12	16-18	21-24	Very High SES	> \$200,000
EO 5	9-10	13-15	17-20	High SES	\$150,000 to \$199,999
EO 4	7-8	10-12	13-16	Moderate SES	\$75,000 to \$149,999
EO 3	5-6	5-9	9-12	Low SES	\$50,000 to \$74,999
EO 2	2-4	2-6	2-8	Very Low SES	<\$50,000
No Score Computed or NSC	Missing Parental Education or Occupation Data so score is not calculated				

Results

Demographic Information

Variable	2012-13 N (%)	2015-16 N (%)
Total Students who applied	17,543	16,369
Major Race-Ethnicity	12,540 (72)	11,736 (72)
Minority Race-Ethnicity	3,201 (18)	3,744 (23)
Number of applicants with no or incomplete parent one data	4,414 (25)	3,625 (22)
Number of applicants with no or incomplete parent two data	6,462 (37)	5,734 (35)
Number of applicants with parental one education information	15,101 (86)	14,635 (89)
Number of applicants with parental two education information	13,603 (78)	12,976 (79)
Number of applicants with parental one occupation information	10,455 (60)	9,941 (61)
Number of applicants with parental two occupation information	8,149 (47)	7,873 (48)
Number who provided PCAT^b Score	14,060 (80)	12,719 (78)
Number who Provided GPA^c	17,343 (99)	16,089 (98)
Number who received at least one acceptance offer	12,236 (70)	13,039 (80)

2016 Applicant SES and GPA

Table 3. Applicants' EO Indicator and GPA with No Admissions Offer 2016

	Parent 1					Parent 2				
	Low SES (EO=2) N=588 N(%)	Low to Moderate SES (EO=3) N=589 N(%)	Moderate to High SES (EO=4) N=417 N(%)	High SES (EO=5) N=340 N(%)	Very High SES (EO=6) N=363 N(%)	Low SES (EO=2) N=553 N(%)	Low to Moderate SES (EO=3) N=524 N(%)	Moderate to High SES (EO=4) N=292 N(%)	High SES (EO=5) N=233 N(%)	Very High SES (EO=6) N=194 N(%)
2.00 or Less	17 (3)	22 (4)	19 (5)	12 (4)	11 (3)	20 (4)	19 (4)	14 (5)	9 (4)	5 (3)
2.01-2.50	136 (23)	132 (22)	98 (24)	66 (19)	81 (22)	125 (23)	118 (23)	59 (20)	56 (24)	39 (20)
2.51-3.00	217 (37)	230 (39)	141 (34)	140 (41)	137 (38)	212 (38)	185 (35)	104 (36)	82 (35)	71 (37)
3.01-3.50	157 (27)	144 (24)	112 (27)	89 (26)	97 (27)	147 (27)	143 (27)	79 (27)	62 (27)	53 (27)
3.51-4.00	61 (10)	61 (10)	47 (11)	33 (10)	37 (10)	49 (9)	59 (11)	36 (12)	24 (10)	26 (13)

2013 Applicant SES and GPA

Table 4. Applicants' EO Indicator and GPA with No Admissions Offer 2013

	Parent 1					Parent 2				
	Low SES (EO=2) N=918 N(%)	Low to Moderate SES (EO=3) N=932 N(%)	Moderate to High SES (EO=4) N=623 N(%)	High SES (EO=5) N=605 N(%)	Very High SES (EO=6) N=573 N(%)	Low SES (EO=2) N=861 N(%)	Low to Moderate SES (EO=3) N=874 N(%)	Moderate to High SES (EO=4) N=485 N(%)	High SES (EO=5) N=416 N(%)	Very High SES (EO=6) N=312 N(%)
2.00 or Less	13 (1)	14 (2)	14 (2)	9 (2)	7 (1)	15 (2)	19 (2)	6 (1)	5 (1)	3 (1)
2.01-2.50	138 (15)	115 (12)	104 (17)	87 (14)	89 (16)	123 (14)	124 (14)	70 (14)	57 (14)	48 (15)
2.51-3.00	363 (40)	360 (39)	220 (35)	230 (38)	207 (36)	335 (39)	332 (38)	164 (34)	158 (38)	121 (39)
3.01-3.50	274 (30)	313 (34)	187 (30)	193 (32)	185 (32)	273 (32)	272 (31)	173 (36)	131 (32)	100 (32)
3.51-4.00	130 (14)	130 (14)	98 (16)	86 (14)	85 (15)	115 (13)	127 (15)	72 (15)	65 (16)	40 (13)

2016 Applicant SES and PCAT

Table 5. Applicants' EO Indicator and PCAT Composite Percentile with No Admissions Offer 2016

	Parent 1					Parent 2				
	Low SES (EO=2) N=397 N(%)	Low to Moderate SES (EO=3) N=428 N(%)	Moderate to High SES (EO=4) N=305 N(%)	High SES (EO=5) N=242 N(%)	Very High SES (EO=6) N=255 N(%)	Low SES (EO=2) N=405 N(%)	Low to Moderate SES (EO=3) N=390 N(%)	Moderate to High SES (EO=4) N=206 N(%)	High SES (EO=5) N=163 N(%)	Very High SES (EO=6) N=128 N(%)
PCAT Composite Percentile Ranking										
1-29	219 (55)	229 (54)	137 (45)	114 (47)	120 (47)	212 (52)	181 (46)	98 (48)	80 (49)	56 (44)
30-54	99 (25)	99 (23)	71 (23)	57 (24)	58 (23)	108 (27)	91 (23)	44 (21)	36 (22)	26 (20)
55-74	45 (11)	43 (10)	51 (17)	34 (14)	40 (16)	47 (12)	58 (15)	31 (15)	21 (13)	16 (13)
75-99	34 (9)	57 (13)	46 (15)	37 (15)	37 (15)	38 (9)	60 (15)	33 (16)	26 (16)	30 (23)

2013 Applicant SES and PCAT

Table 6. Applicants' EO Indicator and PCAT Composite Percentile with No Admissions Offer 2013

PCAT Composite Percentile Ranking	Parent 1					Parent 2				
	Low SES	Low to	Moderate	High SES	Very High	Low SES	Low to	Moderate	High SES	Very High
	(EO=2)	Moderate	to High	(EO=5)	SES	(EO=2)	Moderate	to High	(EO=5)	SES
	N=651	SES (EO=3)	SES (EO=4)	N=452	(EO=6)	N=624	SES (EO=3)	SES (EO=4)	N=303	(EO=6)
	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)
1-29	256 (39)	264 (39)	188 (41)	169 (37)	124 (31)	256 (41)	254 (38)	119 (34)	103 (34)	67 (31)
30-54	205 (32)	207 (30)	136 (30)	131 (29)	121 (28)	179 (29)	205 (31)	112 (32)	86 (28)	63 (29)
55-74	112 (17)	126 (19)	73 (16)	72 (16)	93 (23)	117 (19)	114 (17)	62 (18)	56 (19)	52 (24)
75-99	78 (12)	83 (12)	63 (14)	80 (18)	71 (18)	72 (12)	84 (13)	59 (17)	58 (19)	36 (17)

Discussion

- 435 low SES applicants based on parent one EO indicator had competitive GPA (>2.5) in 2016
- 79 low SES applicants based on parent one EO indicator had competitive PCAT ($>54\%$) in 2016
- Schools are not accounting for SES (odds ratio is 1.04 for logistic regression)
- Even though a decline in the number of academically competitive low SES applicants not accepted between 2012 – 2013 and 2015 – 2016 data, still accepting these students at same rate (14% vs. 13% total applicant pool)

How to Use the EO Indicator

- Use with caution
- Define your diversity goals with an admissions process that supports these goals
 - Mission Statement, Vision, Diversity Statement
- One of many components to assess a candidate for admission
 - Use in combination with other academic factors

Conclusion

- EO indicator can help further diversify academically competitive applicants
- EO indicator can help colleges and schools of pharmacy achieve their institution's diversity goals

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