



Effects of social desirability on grit survey and grit grid scores in pharmacy school applicants



Elizabeth M. Lafitte, PharmD, BCPS¹; Corey M. Guidry, PharmD¹; Sara C. Pearson, PharmD¹; Courtney A. Robertson, PharmD, BCPS¹; David J. Caldwell, PharmD, AAHVP²

¹University of Louisiana at Monroe College of Pharmacy, ²University of Arkansas for Medical Sciences College of Pharmacy

CONCLUSIONS

- When grouped by social desirability score, grit survey scores were significantly different, but grit grid scores were not.
- Grit survey scores appear to be influenced by social desirability bias and may be unreliable in the admissions setting.
- The grit activities grid offers an alternative method of grit measurement that appears to be less influenced by social desirability and, therefore, may be more useful in high stakes settings.

RESULTS

Table 1: Grit survey and grit grid scores by SDS group

Mean scores	SDS ≤ 3 n=15	SDS = 4 n=30	p-value
Grit survey	3.95	4.24	0.01
<i>Consistency of interest subscale</i>	3.67	4.01	0.02
<i>Persistence of effort subscale</i>	4.25	4.45	0.05
Grit Grid	3.64	3.93	0.25

OBJECTIVE

To determine whether grit survey scores and grit grid scores may be influenced by social desirability bias in pharmacy school applicants.

BACKGROUND

What is grit? How is it measured?

- Grit, defined by Duckworth et al, is the perseverance and passion for long-term goals.¹
- It can be measured using the validated grit-S scale and grit activities grid.^{2,3}

Why is grit measurement useful in pharmacy education?

- Grit survey scores predict attainment of post-graduate residencies⁴

What is social desirability? How is it measured?

- Social desirability is a type of response bias in which respondents tend to answer in a way that is viewed favorably by others.
- Attitudinal self-assessments are available to measure a respondents tendency to answer in a socially desirable tendency.⁵

METHODS

1 An 8-item grit survey was administered to all applicants entering in Fall 2017.

8-item grit survey

1. New ideas and projects sometimes distract me from previous ones.
2. Setbacks don't discourage me.
3. I have been obsessed with a certain idea or project for a short time but later lost interest.
4. I am a hard worker.
5. I often set a goal but later choose to pursue a different one.
6. I have difficulty maintaining focus on projects that take longer than a few months to complete.
7. I finish whatever I begin.
8. I am diligent.

2 A 4-item self-report of social desirability was completed by all applicants.

Social Desirability Scale

1. Would you smile at people every time you meet them?
2. Do you always practice what you preach?
3. If you say to people that you will do something, do you always keep your promise no matter how inconvenient it might be?
4. Would you ever lie to people?

3 Grit grid scores were calculated using applicants' supplemental applications.

Grit activities grid

- Each applicant included information in supplemental application on three activities:
 - Activity name
 - Activity type (hobby, paid work, school club, sports, volunteer)
 - Years of participation
 - Highest achievement
- Each activity entered into the grid was scored using the following scales:
 - Typical achievement* (1 point)
 - Participation in activity with little or no special recognition or awards
 - Examples: club member, non-varsity team member
 - Moderate achievement* (2 points)
 - Participation in an activity with minor level of recognition or awards
 - Examples: club treasurer/secretary, varsity team member, employee of the month
 - High achievement* (3 points)
 - Participation in activity with high level of recognition or awards
 - Examples: club president, varsity team captain, work supervisor

Figure 1: Distribution of grit grid scores

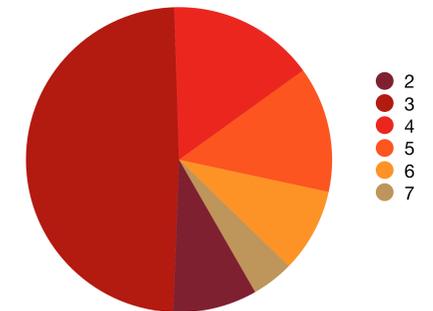
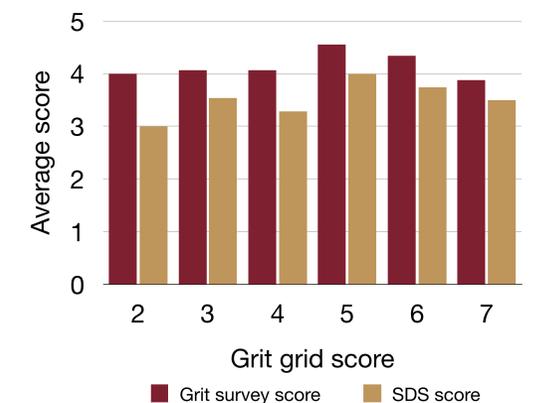


Figure 2: Grit survey and SDS scores by grit grid group



DISCUSSION

Insight

- Total grit survey and consistency of interest subscale scores were significantly higher in students who responded to the SDS in the most socially desirable way.
- Grit grid may be a more useful assessment of grit in the pharmacy school admissions process or other high stakes situations where candidates are likely to give socially desirable answers.

Limitations

- A small sample size and uneven social desirability group sizes may limit the generalizability of results.
- Data collection began halfway through admissions cycle, resulting in an incomplete data set for the class entering Fall 2017.

Future Research

- Continue use of the grit survey, social desirability scale and grit grid in future classes; this will allow for a larger sample size and comparison across classes.
- Re-administer grit survey and social desirability self-report in the same population at a later time to assess changes in response type based on setting.

REFERENCES

1. Duckworth AL, Peterson C, Matthews MD, Kelly DR. Grit: perseverance and passion for long-term goals. *J Pers Soc Psychol.* 2007;92(6):1087-101.
2. Duckworth AL, Quinn PD. Development and validation of the short grit scale (grit-s). *J Pers Assess.* 2009;91(2):166-74.
3. Robertson-kraft C, Duckworth AL. True Grit: Trait-level Perseverance and Passion for Long-term Goals Predicts Effectiveness and Retention among Novice Teachers. *Teach Coll Rec* (1970). 2014;116(3)
4. Palisoc AJL, Matsumoto RR, Ho J, et al. Relationship Between Grit with Academic Performance and Attainment of Postgraduate Training in Pharmacy Students. *Am J Pharm Educ.* 2017;81(4):67.
5. Haghghat, R. The Development of the Brief Social Desirability Scale (BSDS). *Eur J Psychol.* 2007;3(4).