

Are Parents Ready? A Factor Analysis Study for Postsecondary Education

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Inclusive postsecondary education (IPSE) programs can provide young adults with intellectual and developmental disabilities (IDD) opportunities for training and experiences in continuing academic instruction, transition goals, independent living, and employment. Parent readiness is an important aspect of having young adults embrace their increasing independence. While the prospective student must be ready to attend the institution, understanding the “readiness” of parents will help guide the development of additional parent-related materials that can help them with the transition process. It was with this intent that the Graff Parent Readiness Scales (GPRS) were developed. The purpose of this study is to conduct an exploratory factor analysis on the GPRS in order to establish construct validity of the instrument. Results showed a six-factor solution. The implications for IPSE programs are clear; by addressing parental concerns and forging an alliance with the institution, students with IDD will have greater success.

Parents play a key role in the life of young adults with IDD in many ways. Parents are the ones most likely to seek out opportunities for young adults with IDD once they leave school. In that vein, the parents’ perceptions of the skills and the potential of their young adult will influence where they look for post-school opportunities (Schultz, 2013). Although parents of typically-developing young adults find that their children are increasingly taking control of their own lives, parents of young adults with disabilities may actually find their children are still dependent on them for support and help (Bianco, Garrison-Wade, Tobin, & Lehmann, 2009). This extended time period of involvement in the lives of their young-adult children with disabilities may also be more intense and complex than parents might have been expecting (Rueda, Monzo, Shapiro, Gomez, & Blacher, 2005). Many families think sending individuals to college to “grow up” and mature is a goal in late adolescence. However, only recently has this become an option for students with IDD (Grigal, Hart, & Weir, 2013). For this reason, it is possible that the parents may have expectations for this milestone that are unaligned with the actual experience.

Inclusive postsecondary education (IPSE) programs can provide young adults with IDD opportunities for training and experiences in continuing academic instruction, transition goals, independent living, and employment (Bianco et al., 2009; Dillon & Underwood, 2012; Kraemer & Blacher, 2001; Papay & Bambara, 2011). Understanding the “readiness” of parents for the expectations of higher education programs for individuals with IDD will help guide development of additional parent-related materials to help them with the transition process (Martinez, Conroy, & Cerreto, 2012). If parents are not ready for this transition, their reluctance for the students to take on new responsibilities or encounter new situations might cause hesitation, even faltering confidence for the student. When parents are ready emotionally and cognitively for the transition process, the young adult with disabilities will ultimately benefit.

Rationale

Since IPSE programs only support students with IDD for a defined period of time over a lifespan of potential need (Hodapp, Burke, Finley, & Urbano, 2016), there must be the recognition of shifting relationships. Certain themes runs through the literature, such as type of employment, compensation, work expectations, autonomy, independent living, and friendships (Blustein, Carter, & McMillan, 2016; Doren, Gau, & Lindstrom, 2012; Dyke, Bourke, Llewellyn, & Leonard, 2013) to reflect the parent practices of moving staunch *advocate to advisor* role (Francis, Fuchs, Johnson, Gordon, & Grant, 2016). Understanding the family concerns is paramount in order for the individual with IDD make the most growth, so a parent/program partnership seems like a natural solution (Turnbull & Turnbull, 2015). In order for that collaborative process to work most effectively, identifying families who have the most anxiety early on in the application process is a beneficial first step. The current philosophy with the IPSE movement is to have families forge alliances to create a formative support group for all individuals with IDD (Westling & Kelley, 2015). By better understanding family concerns and addressing those issues, programs will have better student outcomes in the areas of independence and flexible thinking. Therefore, it is naturally to investigate ways for this program/family partnership to develop as well as best practices to nurture this on-going connection.

Parent Expectations

Historically, parent expectations for their child to attend an institute of higher education was found to be quite low for sons/daughters with IDD (Doren et al., 2012). However, as a result of the Higher Education Opportunity Act (2008), students with IDD are attending colleges and universities in greater numbers (Grigal et al., 2015). Parents who had been primarily their young adults’ “voices” or advocates are taking on new roles (Folk, Yamamoto, & Stodden, 2012) by letting their young adults gain skills and independence. This often includes allowing the young adult to learn from missteps or mistakes on the path to learning and adulthood.

Some parents have a harder time letting go, perhaps because they know that the individual with disability will need lifelong support (Hirano & Rowe, 2016). In fact, parents of neurotypical students can become overbearing, which results in their young adult

having negative feelings and less satisfaction (Schiffrin et al., 2014). This can have a compounding negative consequence on individuals with IDD, who often view their families as extensions of their own thought patterns and values, even if the influence causes feelings that are negative. For example, if a family member wants their individual to behave politely, the individual with IDD may attribute their well-mannered actions stemming from the families' idea rather than a direct response from a positive interpersonal exchange. Indeed, Correia, Seabra-Santos, Campos Pinto, and Brown (2017), noted that families tend to influence the values of individuals with IDD, especially in the areas of relationships and social constructs. Where and when to support and when to step back are common parental issues (Cutright, 2008), so adding a factor of disability contributes to the confusion and uneasiness.

Parent Involvement in IPSE

Parent involvement and decision-making is variable within educational options of their young adult with disabilities. In a recent Delphi study, parent involvement in a postsecondary setting was characterized by having the program provide: information; networking; collaboration with the transition processes; ongoing communication; and a community presence (Rowe et al., 2015). This reinforces the literature that has previously stated that parent involvement is a predictive outcome to success (Test, Kemp-Inman, Diegelmann, Hitt, & Bethune, 2015). Yarbrough, Getzel, and Kester (2014) found that parents wanted their young adult to be challenged, have connections to the community, and have a college experience that encompasses more than just academic learning. Yet, there is limited research into parental perceptions of the transition process (Bianco et al., 2009; Dillon & Underwood, 2012). The real question is how much parental involvement for students with IDD is needed at the postsecondary level to ensure adequate support that creates the most gains in adult independence.

Parents can be a barrier to developing independence skills for their students with IDD. Indeed, parents might even assume their attitudes and feeling mimic those of their students (Rossetti et al., 2016). While this may be true some of the time, learning takes place by making errors, even taking risks (Lindsay & Beail, 2004). The overprotective mentality of parents for students with IDD can lead to less trying and growth. Therefore, identifying families in need of more training in transitioning to more of an advisor role of becomes a mission (Francis, Hill, Blue-Banning, Turnbull, & Haines, 2016). When parent expectations about their level of involvement in the post-school setting and their concerns about the setting itself are understood, professionals can better address parental needs (Francis, Stride, Reed, & Chiu, 2017).

Purpose

When postsecondary programs recognize parental concerns and address them, a strong and important alliance between institution and parent can be forged (Francis, Fuchs, et al., 2016). Parent readiness, therefore, is an important aspect of having young adults embrace their increasing independence. It was with the intent of knowing potential areas of parental concern that the Graff Parent Readiness Scales (GPRS) were developed. The

purpose of this study is to iteratively develop the GPRS including conducting an exploratory factor analysis in order to establish construct validity of the instrument.

Method

There are three distinct iterative parts of the methodology: the scale development, the pilot study, and the large-scale study.

Scale Development

Instrument.

The GPRS was designed to measure the readiness of parents of students with disabilities to transition to IPSE. The original questions evolved as a result of common concerns or issues that arose around program misperceptions and through parent feedback with the director over a five-year period. The GPRS consisted of 25 items that were believed to comprise five categories. The five categories included student safety, postsecondary programs, direct involvement, strengths or challenges of the student, and concerns about the future. These categories were chosen because of inclusion in relevant literature (Thoma et al., 2011) of the time and in consultation with professionals employed in local educational agencies in the field, such as transition specialists. An expert panel was convened to revise and reformat the questions (see Table 1).

Table 1. Original Items of the GPRS

Original Categories	Item Number	Statement
Student Safety	Item 1	I expect to know everything my student does at the university
	Item 2	I expect one-one support all day.
	Item 3	I worry about my student talking to other students unsupervised.
	Item 4	I worry about my student crossing the street.
	Item 5	I need to know the homework assignment for each class.
Postsecondary Programs	Item 6	I need to know the calendar of activities offered to my student.
	Item 7	I would like to speak with my student's support staff.
	Item 8	I would like to attend classes to see my student interact with others.
	Item 9	I trust my student's judgement.
	Item 10	I trust my student's ability to handle small sums of money.
Direct Involvement	Item 11	I know my student, with support, will develop friendships.
	Item 12	I know my student, with support, will try new opportunities.

Original Categories	Item Number	Statement	
Strengths & Challenges of the Student	Item 13	My student has the ability to handle frustration.	
	Item 14	My student has the ability to seek assistance.	
	Item 15	Often, I am in contact with my student more than 3 times a day.	
	Item 16	Often, I am telling my student what to do and say.	
	Item 17	I check up on my student.	
	Item 18	I check to see if my student has the correct facts.	
	Item 19	I believe, I know what is best for my student.	
	Item 20	I believe a postsecondary education is important for my student.	
	Concerns about the Future	Item 21	I feel that my student knows what is best for him/herself.
		Item 22	I feel that my student wants to attend the university.
Item 23		My student will live independent of our family after graduation.	
Item 24		My student will have meaningful employment after graduation.	
Item 25		Person Centered Planning will help my student achieve their goals.	

Expert panel.

An expert panel (N=8) was consulted in order to establish content validity of the GPRS. The expert panel consisted of the program director, program coordinators, senior support staff, and personnel all from the same IPSE program. The director and coordinators were individuals with a minimum of master's of special education degrees and a maximum of a terminal degree who had worked within the program for over 5 years and were professional faculty within the college. The senior staff and personnel were support professionals who had been with the program for over three years and knew the philosophy as well as the goals of the program. Collectively, the expert panel had practiced an average of 10 or more years of working within the field of special education. The expert panel reviewed the questions and categories to be used within a focus group setting. They were tasked with providing feedback on question clarity, the level of detail in each question, and issues of negation. The questions were then changed based on that feedback. Once completed the interactive questions set, a pilot survey was sent out to families to review the preliminary constructs.

Pilot Study

The survey was emailed to all the parents of students currently enrolled in the program (n=41). Only one email was sent per family and only one returned survey per family was expected. For the purpose of the present study, each set of parents was considered one respondent. Of the 41 potential respondents, 15 were parents of first-year students, 10 were parents of second-year students, 12 were parents of third-year students, and 6 were parents of fourth-year students. Nineteen surveys were returned, which is a 46% response rate. Of the respondents, 71% (n=13) were from the greater Washington, DC metropolitan area (9 from northern Virginia, 2 from Maryland, and 1 from Washington, DC). Of the 29% of respondents from other areas, one was from Pennsylvania, two were from New York, one was from Connecticut, and one was from Ohio. The respondents represented the parents of 4 fourth-year students (21%), 6 third-year students (32%), 3 second-year students (16%) and 6 first-year students (32%). Problems with question clarity, including word choices and phrasing, were corrected as a result of feedback from this pilot of the scale. Based on this process, the final set of questions was established.

Large Scale Study

Participants.

Five IPSE programs at Institutes of Higher Education participated in the study. Four of the IHE are accredited from the Southern Association of Colleges and Schools and one from the Western Association as determined by geographic location in the United States. The GPRS was administered by the IPSE to parents or guardians of students applying to the various participating programs. Two hundred twenty-nine parents of applying students completed the scale. Fifty-nine percent of the students attended programs that were located within a 50-mile radius of their homes. The participants were from Virginia (66%), Georgia (28%), Utah (14%), and Maryland (5.7%). Other states were represented minimally. Each of the programs serves students with IDD, as noted by the following percentages of applicants' disability category: 46.7% intellectual disabilities; 26.6% autism spectrum disorder; 7% other health impairment; 6.1% cerebral palsy; 4.8% learning disabilities; 4.4% of multiple disabilities; 2.2% developmental disabilities; and 2.2% other.

Data collection.

Each institution collected data via its application and interview process. Non-identifying descriptive data was provided to the researchers upon request. The researcher entered the data into IBM SPSS Statistics, v. 24, and reliability of entry was checked by comparing the entered data to the original instruments by a member of the research team. When available, both data for students accepted to the participating IPSE and those that were rejected were used (accepted, n = 104, 45.4%; rejected, n = 60, 26.3%; unknown status, n = 65, 28.4%). The collection resulted in 229 total scales from the five IPSE institutions.

Design and Data Analysis.

Each item response on the survey instrument had a Likert scale of 1 to 5. Demographic data was gathered where available (i.e., disability area; location; and proximity). Of the 229 responses, 213 scales had all the items completed and were usable for this analysis. Due to a suspected relationship between components from prior literature (Thoma et al., 2011), an oblique rotation (Oblim Direct) was conducted. The resulting component correlation matrix was examined. None of the correlations exceeded the .32 threshold suggested by Tabachnick & Fidell (2001), suggesting that little overlap exists and therefore, an orthogonal rotation could be conducted instead (see Table 2).

Table 2. Component Correlation Matrix from Oblim Direct rotation

Component	1	2	3	4	5	6	7	8
1	1.000	-0.085	0.220	-0.073	0.119	-0.092	-0.067	-0.292
2	-0.085	1.000	-0.100	0.132	-0.143	0.182	0.205	0.012
3	0.220	-0.100	1.000	-0.083	0.093	-0.058	-0.043	-0.247
4	-0.073	0.132	-0.083	1.000	-0.060	0.062	0.140	0.021
5	0.119	-0.143	0.093	-0.060	1.000	-0.124	-0.119	-0.038
6	-0.092	0.182	-0.058	0.062	-0.124	1.000	0.171	0.077
7	-0.067	0.205	-0.043	0.140	-0.119	0.171	1.000	0.036
8	-0.292	0.012	-0.247	0.021	-0.038	0.077	0.036	1.000

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

An initial principal component analysis (PCA) was conducted on the 25 items using an orthogonal rotation (Varimax). The Kaiser-Meyer-Olkin (KMO) was .787, meaning that the sampling was adequate when compared to the acceptable level of .5 (Field, 2009). Individual KMO Bartlett's test of sphericity suggests that item correlations were significantly large enough to suggest a PCA ($\chi^2(300) = 1543.503, p < .001$).

Eight components had an eigenvalue above Kaiser's cutoff of 1 which explained 63.4% of the variance. An examination of the scree plot showed a dramatic leveling off after the third component (see Figure 1).

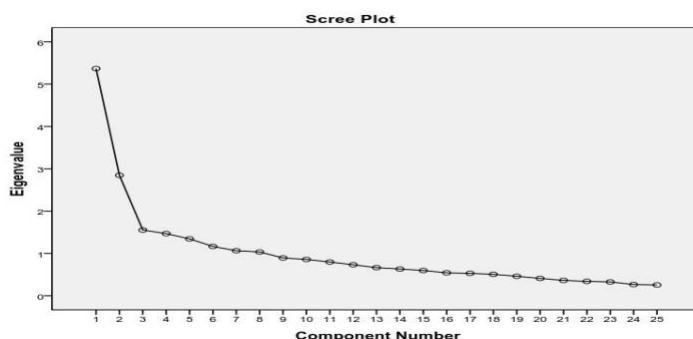


Figure 1. Initial Varimax Scree Plot

Therefore, eight components from eigenvalues were reviewed by the researchers to determine whether to accept the three-component solution suggested by the scree plot or an alternative. The rotated component matrix was examined to determine where the items loaded (see Table 3).

Table 3. Initial Rotated Component Matrix

Rotated Component Matrix^a

	Component							
	1	2	3	4	5	6	7	8
question1	0.784	0.159	-0.039	0.270	-0.027	0.007	0.062	0.049
question2	0.804	0.129	-0.066	0.070	-0.049	-0.103	-0.048	0.023
question3	0.438	0.331	-0.251	-0.059	-0.205	-0.441	-0.043	-0.011
question4	0.402	0.084	0.163	0.133	0.154	-0.652	-0.024	0.082
question5	0.690	0.105	-0.148	0.301	-0.157	-0.042	0.025	-0.159
question6	0.344	0.230	0.057	0.678	-0.065	-0.050	-0.054	0.099
question7	0.166	0.194	0.000	0.739	-0.031	-0.053	0.121	-0.009
question8	0.114	0.156	-0.270	0.643	0.035	-0.119	-0.103	0.061
question9	0.173	-0.124	-0.062	-0.024	0.492	0.526	0.066	0.350
question10	0.031	0.083	0.246	-0.097	0.123	0.749	0.020	0.036
question11	-0.063	-0.005	0.805	-0.106	0.175	0.045	0.164	0.047
question12	-0.099	-0.100	0.763	-0.096	0.203	0.065	0.147	0.068
question13	-0.103	-0.022	0.161	-0.224	0.738	-0.071	-0.022	0.047
question14	-0.082	-0.183	0.398	0.138	0.571	-0.019	-0.043	0.037
question15	0.410	0.484	-0.070	-0.006	0.174	-0.017	0.110	-0.367
question16	-0.015	0.523	-0.254	0.168	-0.060	-0.225	-0.065	-0.237
question17	0.161	0.769	-0.034	0.209	-0.119	0.077	-0.106	0.165
question18	0.234	0.657	-0.023	0.227	-0.124	-0.092	-0.230	0.159
question19	0.081	0.477	0.114	0.329	0.014	0.096	0.077	-0.261
question20	0.008	-0.028	0.076	0.070	0.073	-0.008	0.165	0.751
question21	-0.093	-0.033	0.077	0.110	0.681	0.303	0.223	-0.099
question22	-0.096	0.030	0.469	0.115	-0.127	0.178	0.146	0.505
question23	-0.435	0.208	-0.050	-0.240	0.350	-0.075	0.304	0.403
question24	-0.085	-0.024	0.226	-0.045	0.122	0.154	0.741	0.108
question25	0.103	-0.164	0.114	0.060	-0.006	-0.068	0.786	0.144

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Values with an absolute value above 0.4 are bolded.

a. Rotation converged in 8 iterations.

Items were then compared and relations were discussed by the researchers to determine the validity of the items' relation to one another. It was decided that the seventh and eighth components explained only minor variance (4.3% and 4.1%, respectively). This resulted in the rejection of items 20, 22, 24, and 25.

A second PCA (Varimax) was conducted, which excluded the rejected items. The exclusion of these items resulted in being able to use six more responses that were excluded in the initial run for missing responses to at least one of the items that was rejected. The Kaiser-Mayer-Olkin (KMO) increased from .787 to .795, still adequate sampling. Individual KMO Bartlett's test of sphericity suggests that item correlations were still significantly large enough to suggest a PCA ($\chi^2(210) = 1338.125, p < .001$).

Six components resulted with eigenvalues above 1. These six components explained 60.0% of the variance. The scree plot again suggested a three-component solution (see Figure 2).

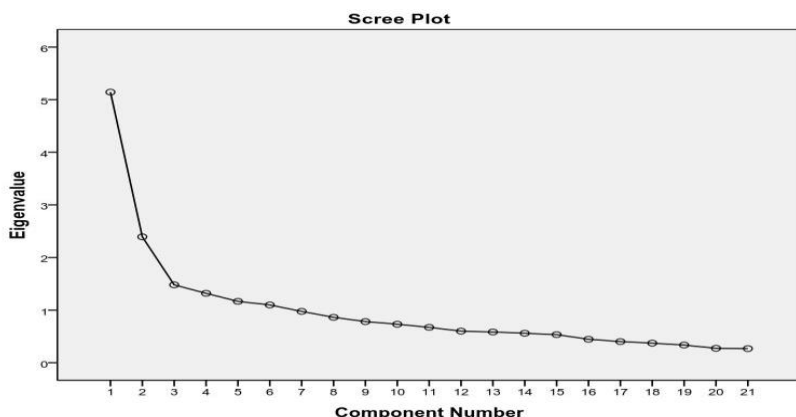


Figure 2. Varimax Scree Plot with items 20, 22, 24, 25 removed

Upon examination of the rotated component matrix, it was noted that the items loaded strongly in the same components, as in the previous analysis. However, the components loaded in a different order on this second PCA (see Table 4). While examining this new rotated component matrix, the researchers questioned the inclusion of item 23. Item 23, in both the initial and second PCA runs, loaded similarly in multiple components (components 1 and 8 in the initial and component 1 and 3 in the second).

Table 4. Rotated Component Matrix with items 20, 22, 24, 25 removed

Rotated Component Matrix^a

	Component					
	1	2	3	4	5	6
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question1	0.775	0.187	0.009	0.268	-0.027	0.034
question2	0.777	0.119	-0.001	0.110	-0.088	0.161
question3	0.397	0.280	-0.172	-0.001	-0.252	0.496
question4	0.334	0.024	0.151	0.217	0.174	0.674
question5	0.711	0.176	-0.183	0.236	-0.127	0.053
question6	0.332	0.263	-0.113	0.667	0.094	0.048
question7	0.170	0.194	-0.012	0.737	0.009	0.046
question8	0.087	0.141	0.014	0.680	-0.281	0.109
question9	0.114	-0.154	0.551	0.085	-0.045	-0.521
question10	0.035	0.058	0.149	-0.071	0.236	-0.726
question11	-0.078	-0.010	0.184	-0.101	0.837	-0.066
question12	-0.119	-0.125	0.184	-0.046	0.821	-0.083
question13	-0.129	-0.012	0.721	-0.220	0.137	0.062
question14	-0.048	-0.167	0.594	0.083	0.297	0.029
question15	0.449	0.555	0.126	-0.126	-0.037	0.034
question16	0.027	0.608	-0.094	-0.013	-0.284	0.209
question17	0.076	0.710	-0.073	0.324	-0.060	-0.037
question18	0.142	0.655	-0.119	0.300	-0.065	0.113
question19	0.112	0.552	-0.028	0.222	0.119	-0.118
question21	-0.030	-0.019	0.665	0.021	0.105	-0.307
question23	-0.508	0.085	0.455	-0.075	0.021	0.079

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Values with an absolute value above 0.4 are bolded.

a. Rotation converged in 9 iterations.

The decision was made to reject item 23 from the scale. This decision was supported by comparing Cronbach's α of the component (Cronbach's $\alpha = .755$) and the Cronbach's α if item 23 was deleted (Cronbach's $\alpha = .798$). The increase in Cronbach's α suggests that removing item 23 increases the reliability of the component.

A final PCA (Varimax) was conducted which excluded items 20, 22, 23, 24, and 25. The Kaiser-Mayer-Olkin (KMO) increased from .795 to .799, still adequate sampling. Bartlett's test of sphericity suggests that item correlations were significantly large enough to suggest a PCA ($\chi^2(190) = 1280.242, p < .001$). Six components had an eigenvalue greater than 1 and together these components explained 61.62% of the variance. An examination of the scree plot showed a dramatic leveling off after the third component and a minor inflection after the sixth component (see Figure 3).

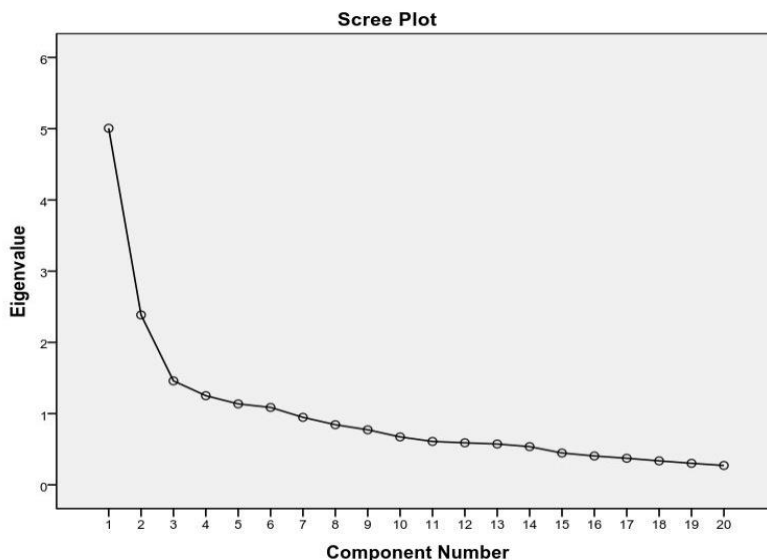


Figure 3. Varimax Scree Plot with items 20, 22, 23, 24, 25 removed

With an adequate sampling and evidence supporting a six-component solution, this is the solution that was accepted and considered for interpretation (see Table 5).

Table 5. Rotated Component Matrix with items 20, 22, 23, 24, 25 removed

Rotated Component Matrix^a

	Component					
	1	2	3	4	5	6
question1	0.806	0.156	0.264	-0.047	-0.016	0.033
question2	0.815	0.087	0.103	-0.055	-0.068	-0.088
question3	0.461	0.245	-0.006	-0.198	-0.230	-0.458
question4	0.394	0.004	0.217	0.170	0.185	-0.620
question5	0.690	0.175	0.243	-0.172	-0.142	-0.042
question6	0.335	0.258	0.670	-0.114	0.087	-0.038
question7	0.165	0.199	0.740	0.001	0.000	-0.040
question8	0.085	0.147	0.681	0.027	-0.286	-0.103
question9	0.134	-0.168	0.065	0.439	-0.013	0.612
question10	-0.007	0.075	-0.084	0.088	0.247	0.737
question11	-0.070	-0.007	-0.103	0.185	0.837	0.074
question12	-0.127	-0.112	-0.047	0.199	0.820	0.084
question13	-0.126	0.007	-0.216	0.753	0.118	-0.027
question14	-0.071	-0.140	0.095	0.657	0.261	-0.015
question15	0.437	0.562	-0.119	0.152	-0.063	-0.030

question16	0.006	0.627	0.000	-0.023	-0.319	-0.258
question17	0.121	0.690	0.308	-0.142	-0.029	0.066
question18	0.175	0.643	0.290	-0.152	-0.046	-0.099
question19	0.094	0.560	0.230	-0.007	0.096	0.095
question21	-0.054	0.001	0.027	0.679	0.075	0.334

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Values with an absolute value above 0.4 are bolded.

a. Rotation converged in 8 iterations.

Interpretation

Examination of the items that are included in each component suggests common themes that the components represent. The first component seems to represent parental expectations of what the program will do to support the student and is titled Family Expectations. The second component seems to represent the parental involvement in their student's decision making and is titled Family Beliefs. The third component seems to represent the amount of information that the parent desires about their student within the program and is titled Day to Day Knowledge. The fourth component seems to represent the parental idea of their student's abilities and is titled Abilities. The fifth component seems to represent the parental expectation of student growth in the new environment and is titled Opportunities. The sixth component seems to represent the parental assessment of their student's decision making skills and is titled Student Judgement (see Appendix 1 for the revised GPRS.)

Discussion

The GPRS was developed in direct response to seeing the needs of parents of students with IDD entering into inclusive postsecondary education at institutes of higher education. By identifying those parents who seem more hesitant to allow the natural growing process of a young adult with IDD, the IPSE could teach strategies for resiliency. In so doing, it is likely that a more successful parent-program partnership could promote the young adult to make further independent gains. Knowing the "readiness" and expectations of parents can provide postsecondary programs the information necessary to provide adequate supports for both students with disabilities and their parents during this time of transition.

Developing a valid instrument that effectively measures the "readiness" of parents for the expectations of higher education programs for individuals with IDD will help guide development of additional parent-related materials to help them with the transition process. When parents are ready emotionally and cognitively for the transition process (Gross, Wallace, Blue-Banning, Summers, & Turnbull, 2013), the young adult with disabilities will ultimately benefit.

Knowing that students with IDD might reach maturity later in their chronological years, parents often assume responsibility for their children's self-regulation and expression of

their feelings. In fact, parental misgivings and worry can even overshadow their faith in the student's judgment or decision making skills (Davies & Beamish, 2009). This overshadowing directly relates to the Family Beliefs component. Along with superimposing the parent's opinions on their children, there may be uncertainty surrounding the opportunities (Griffin, McMillan, & Hodapp, 2010) regarding what this type of continuing education will do for their student's overall development. If, for example, an introverted student has only participated in two organized activities throughout high school, the family should not expect the student to suddenly become an extrovert and join 10 student clubs.

Parents often have daily involvement with their children, especially with students who have more extreme cognitive impairment (Foley et al., 2013). Therefore, the expectation of extensive 1:1 support as often seen throughout K-12 education (Somers & Settle, 2010) can at times unrealistically carry over into the postsecondary experience. Additionally, as directed by the Family Educational Rights and Privacy Act (FERPA) mandates, information sharing of most educational material is restricted. Communication and coordination (Pallisera, Vilà, & Fullana, 2014) in services have a place in inclusive postsecondary education, but more research will need to be conducted to determine the optimum level and amount. Additionally, the GPRS could be used to screen families who need more assistance in helping their son/daughter transition into adulthood. Further exploration of the type of support needed, whether with an in-person workshop or via online webinar, should be considered in the future as well. Person Centered Planning meetings, which set short and long term activities and goals in IPSE might even need to have a family section akin to an Individual Family Service Plan.

Limitations

Using PCA, six components of the GPRS were extracted. These components highlight various themes of parental concerns: family expectations, family beliefs, day to day knowledge, student abilities, opportunities, and student judgement. However, the topics of quality of life prior to attending postsecondary education, during the student's college experience, and after graduation, must still be examined. The student abilities and student judgement components relate to Boehm, Carter, and Taylor's (2015) findings that challenging behaviors and greater support needs negatively affect the family quality of life during the transition period.

Due to a limited number of IPSE programs nationwide, acceptance to such programs is competitive in nature. As the GPRS was used during the application process to such programs, the results are subject to a social desirability effect. It is reasonable to assume that parents may have filled out the scale in the manner that they felt would match the expectations of the admissions team; the predictive validity of the scale is still untested.

Implications for Practice

FERPA impacts behavior missteps and code of conduct violations at universities. It is only with the permission of the student that information is shared so a team approach can be

implemented. For example, if a student were to have an outburst, campus security would be called and that student might be referred to the psychological counseling center. This particularly impacts students with IDD. Families get accustomed to all information being shared in K-12 education. However, at IPSE, the FERPA rules apply, as the students are legally adults. Therefore, having families work with the student and IPSE becomes paramount. When the team approach is perceived by the students, they have the ability to sign a waiver to permit all three stakeholders—families, program, and student—to communicate on a particular issue.

There is a concern that some IPSE might use the readiness scale as a screening application tool. In other words, by screening out parents who are not defined as “ready,” programs would reduce the overall parent-program conflict. However, this is not the intent of the tool. A much more logical use of the information is to create supportive materials, such as a family handbook, a digital resource library, and workshops. Furthermore, interactive online modules can address specific areas of need. These modules can be done both prior to their student’s attendance at an IPSE and as a suggested refresher lesson should these concerns arise during the time in the program. Results from the scale’s administration can help target families that are in more need of such items. Areas of concern that are more universal can be incorporated into information sessions about the IPSE and orientations upon admittance.

The families will be the support of the individual with IDD for their entire lifespan, much longer than any four-year IPSE (Kyzar, Turnbull, Summers, & Gómez, 2012). Just as the students with IDD will continue to learn, families must continue to be taught strategies that honor, recognize, and reinforce the positive growth aspects of these young adults. Knowing that the family will be a primary support component throughout the individual's lifespan, guiding the family with techniques as well as providing parents resources is the intent of GPRS. From a social-educational perspective, by assisting the families, we are in essence helping the students to be successful, independent adults with IDD, far beyond graduation.

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Appendix 1

Graff Parent Readiness Scale-Revised (GPRS-R)

This scale helps determine the families' readiness for the student with an intellectual and/or developmental disability to attend a postsecondary program. Please circle your response with

1=I strongly agree, 2= I agree, 3=I neither agree nor disagree, 4=I disagree, and 5=I strongly disagree.

1. I expect to know everything my student does at the university.

Strongly Agree 1 2 3 4 5 Strongly Disagree

2. I expect one-one support all day.

Strongly Agree 1 2 3 4 5 Strongly Disagree

3. I worry about my student talking to other students unsupervised.

Strongly Agree 1 2 3 4 5 Strongly Disagree

4. I worry about my student crossing the street.

Strongly Agree 1 2 3 4 5 Strongly Disagree

5. I need to know the homework assignment for each class.

Strongly Agree 1 2 3 4 5 Strongly Disagree

6. I need to know the calendar of activities offered to my student.

Strongly Agree 1 2 3 4 5 Strongly Disagree

7. I would like to speak with my student's support staff.

Strongly Agree 1 2 3 4 5 Strongly Disagree

8. I would like to attend classes to see my student interact with others.

Strongly Agree 1 2 3 4 5 Strongly Disagree

9. I trust my student's judgment.

Strongly Agree 1 2 3 4 5 Strongly Disagree

10. I trust my student's ability to handle small sums of money.

Strongly Agree 1 2 3 4 5 Strongly Disagree

11. I know my student, with support, will develop friendships.

Strongly Agree 1 2 3 4 5 Strongly Disagree

12. I know my student, with support, will try new opportunities.

Strongly Agree 1 2 3 4 5 Strongly Disagree

13. My student has the ability to handle frustration.

Strongly Agree 1 2 3 4 5 Strongly Disagree

14. My student has the ability to seek assistance.

Strongly Agree 1 2 3 4 5 Strongly Disagree

15. Often, I am in contact with my student more than 3 times a day.

Strongly Agree 1 2 3 4 5 Strongly Disagree

16. Often, I am telling my student what to do and say.

Strongly Agree 1 2 3 4 5 Strongly Disagree

17. I check up on my student.

Strongly Agree 1 2 3 4 5 Strongly Disagree

18. I check to see if my student has the correct facts.

Strongly Agree 1 2 3 4 5 Strongly Disagree

19. I believe, I know what is best for my student.

Strongly Agree 1 2 3 4 5 Strongly Disagree

20. I feel that my student knows what is best for him/herself.

Strongly Agree 1 2 3 4 5 Strongly Disagree