Purpose Measure for Youth

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**Author Note**

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**Abstract**

I had four highly used instruments that test for purpose in life. They are the Short-Form purpose subscale of the Psychological well-being scale (Ryff, 1989), Sense of Identity subscale of the APSI (Jaffe, 1998), Life Engagement Test (Scheier et al., 2006) and the Meaning in Life Questionnaire (Steger, 2006). All of these have been used extensively in studies assessing youth purpose. HoIver, none of these scales have been psychometrically analyzed for use on adolescents.

I first analyzed each of the scales using CFA Target Rotation to ascertain whether the factors suggested by the authors of the scales held up in our sample. In the case where they did not hold up I conducted a Parallel Analysis with scree plots as well and a Principal Component Analysis. Based upon this analysis I conducted an EFA looking for simple structure and then conducted another CFA sometimes using Target Rotation as well for confirmatory purposes.

**Results:**

**Exploratory Factor Analysis**

APSI: Despite the fact that this scale is used widely to measure Sense of Identity in adolescence a review of the literature shows that this scale has never been analysed properly for its psychometric properties. Because it contains many of the ideas that are seen as contributing to a sense of purpose such as values and morals (Heine et al. 2006), understanding of self and fit in the world (Steger,2012, Wong, 2012), I see this as a scale that represents purpose in life. In any event based on the literature and how this measure is used in practice (Lounsbury et al., 2007, Lounsbury et al., 2004) I tested a one factor model using Confirmatory Factor Analysis (CFA), Number of observations used was 935. The fit was poor,  for the model was 20 with a  = 316.884, *p* < .001; CFI =0.916, TLI = 0.88, RMSEA = 0.13 [90% CI = 0.11, 0.14], α was 0.83.

Loadings (see Table 1) were also problematic item six (“I don’t know where I fit in the world”) did not load on the factor (0.04) at all and question three (“I have a set of basic beliefs and values or moral standards”) marginally (0.29), α for these items were also higher than the rest 0.85 and 0.88 respectively.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | ML1 | ML1.1 | ML1.2 | com |
| APSI 1 | **0.83** | 0.69 | 0.31 | 1 |
| APSI 2 | **0.77** | 0.59 | 0.41 | 1 |
| APSI 3 | 0.29 | 0.09 | 0.91 | 1 |
| APSI 4 | **0.82** | 0.67 | 0.33 | 1 |
| APSI 5 | **0.69** | 0.47 | 0.53 | 1 |
| APSI 6 | 0.04 | 0.00 | 1.00 | 1 |
| APSI 7 | **0.77** | 0.60 | 0.40 | 1 |
| APSI 8 | **0.81** | 0.65 | 0.35 | 1 |
| SS loadings | 3.77 |  |  |  |

Table 1: Factor Loadings for Exploratory Factor Analysis with Oblimin Rotation of APSI

I then conducted Parallel Analysis using Maximum Likelihood which suggested that there are four factors in the measure. Eigenvalues analysis suggested that there was only one factor. The first factor had and eigenvalue of 3.77 wits SD of 2.04 and explained 52% of the variance, the second factor had an eigenvalue of .3 and SD of 1.1 and explained 15% of the variance, the third factor had an eigenvalue of .16 and SD of .08 and explained 10% of the variance. The fourth, fifth, sixth, seventh and eighth factors had marginally negative eigenvalues, and explaining 16% of the variance. Given the inclusivity of these results an Exploratory Factor Analysis (EFA) was conducted.

An initial analysis with two factors was conducted. The fit was again moderate,  for the model was 13 with a  = 87.21, *p* < .001; CFI =0.96, TLI = 0.91, RMSEA = 0.11 [90% CI = 0.1, 0.13]. Loadings (see Table 2) are also problematic item six (I don’t know where I fit in the world) loaded fully (1.00) on two but question three (I have a set of basic beliefs and values or moral standards) marginally (-0.29).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | ML2 | ML1 | h2 | u2 | com |
| APSI 1 | **0.84** | -0.03 | 0.69 | 0.31 | 1.00 |
| APSI 2 | **0.77** | 0.01 | 0.59 | 0.41 | 1.00 |
| APSI 3 | 0.00 | **1.00** | 1.00 | 0.00 | 1.00 |
| APSI 4 | **0.83** | -0.02 | 0.67 | 0.33 | 1.00 |
| APSI 5 | **0.63** | 0.19 | 0.51 | 0.49 | 1.19 |
| APSI 6 | 0.13 | -0.29 | 0.08 | 0.92 | 1.39 |
| APSI 7 | **0.76** | 0.03 | 0.60 | 0.40 | 1.00 |
| APSI 8 | **0.82** | -0.05 | 0.66 | 0.34 | 1.01 |
| SS loadings | 3.67 | 1.13 |  |  |  |
| ML2 | 1.00 | 0.28 |  |  |  |
| ML1 | 0.28 | 1.00 |  |  |  |

Table 2: Factor Loadings for Exploratory Factor Analysis with Oblimin Rotation of APSI

An analysis with three factors was conducted. The resulted in a better, yet not optimal fit of the data.  for the model was 7 with a  = 26.21, p < .001; CFI =0.98, TLI = 0.93, RMSEA = 0.99 [90% CI = 0.081, 0.12]. Loadings (see Table 3) are still problematic whilst item three (I have a set of basic beliefs and values or moral standards) loaded fully (.99) on factor one, item five (I have a clear set of personal values or moral standards) was now loading on factor two (.96) and item three (I don’t know where I fit in the world) cross loaded on factor one and two (-.35 and .33).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variable | ML3 | ML1 | ML2 | h2 | u2 | com |
| APSI 1 | **0.77** | -0.03 | 0.09 | 0.68 | 0.32 | 1.03 |
| APSI 2 | **0.65** | 0.00 | 0.17 | 0.58 | 0.42 | 1.13 |
| APSI 3 | 0.00 | **0.99** | 0.02 | 1.00 | 0.00 | 1.00 |
| APSI 4 | **0.86** | 0.00 | -0.04 | 0.69 | 0.31 | 1.00 |
| APSI 5 | 0.03 | 0.03 | **0.96** | 0.98 | 0.02 | 1.00 |
| APSI 6 | -0.09 | **-0.35** | **0.33** | 0.14 | 0.86 | 2.14 |
| APSI 7 | **0.79** | 0.06 | -0.04 | 0.62 | 0.38 | 1.02 |
| APSI 8 | **0.85** | -0.03 | -0.04 | 0.67 | 0.33 | 1.01 |
| SS loadings | 3.16 | 1.09 | 1.1 |  |  |  |
| ML3 | 1.00 | 0.26 | 0.65 |  |  |  |
| ML1 | 0.26 | 1.00 | 0.33 |  |  |  |
| ML2 | 0.65 | 0.33 | 1.00 |  |  |  |

Table 3: Factor Loadings for Exploratory Factor Analysis with Oblimin Rotation of APSI

Based on the Parallel Analysis that suggested there are four factors an analysis with four factors was conducted. This resulted in an over fit of the data.  for the model was two with a  = .29, p = .86; CFI =1.00, TLI = 1, RMSEA = 0.003 [90% CI = NA, 0.055]. Loadings (see Table 4) are still problematic whilst item six (I don’t know where I fit in the world) loaded fully (.99) on factor one (nothing else loaded on that factor), item one (I have a definite sense of purpose in life) was now cross loading on factors two (.31) and four (.59), item five (I have a clear set of personal values or moral standards) was now cross loading on factor three (.34) and four (.58), item three (I have a set of basic beliefs and values or moral standards) loaded on factor three (.70).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | ML2 | ML4 | ML1 | ML3 | h2 | u2 | com |
| APSI 1 | **0.31** | **0.59** | -0.02 | -0.04 | 0.71 | 0.29 | 1.52 |
| APSI 2 | 0.04 | **0.80** | -0.05 | -0.01 | 0.69 | 0.31 | 1.01 |
| APSI 3 | 0.05 | 0.01 | -0.12 | **0.70** | 0.56 | 0.44 | 1.07 |
| APSI 4 | **0.67** | 0.20 | -0.04 | -0.03 | 0.69 | 0.31 | 1.20 |
| APSI 5 | 0.03 | **0.58** | 0.18 | **0.34** | 0.64 | 0.36 | 1.84 |
| APSI 6 | 0.01 | -0.01 | **0.99** | -0.03 | 1.00 | 0.00 | 1.00 |
| APSI 7 | **0.89** | -0.10 | 0.03 | 0.08 | 0.70 | 0.30 | 1.04 |
| APSI 8 | **0.65** | 0.21 | 0.00 | -0.05 | 0.67 | 0.33 | 1.22 |
| SS loadings | 2.11 | 1.81 | 1.04 | 0.69 |  |  |  |
| ML2 | 1.00 | 0.80 | 0.05 | 0.29 |  |  |  |
| ML4 | 0.80 | 1.00 | 0.06 | 0.31 |  |  |  |
| ML1 | 0.05 | 0.06 | 1.00 | -0.17 |  |  |  |
| ML3 | 0.29 | 0.31 | -0.17 | 1.00 |  |  |  |

Table 4: Factor Loadings for Exploratory Factor Analysis with Oblimin Rotation of APSI

I then conducted a target rotation to test for a one factor model and found (see table 5) that item six did not load onto one factor at all (-0.04) and item three loaded only marginally (0.29).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | MR1 | MR1.1 | MR1.2 | com |
| APSI 1 | **0.83** | 0.69 | 0.31 | 1 |
| APSI 2 | **0.77** | 0.59 | 0.41 | 1 |
| APSI 3 | 0.29 | 0.09 | 0.91 | 1 |
| APSI 4 | **0.82** | 0.67 | 0.33 | 1 |
| APSI 5 | **0.69** | 0.47 | 0.53 | 1 |
| APSI 6 | -0.04 | 0.00 | 1.00 | 1 |
| APSI 7 | **0.77** | 0.60 | 0.40 | 1 |
| APSI 8 | **0.81** | 0.65 | 0.35 | 1 |
| SS loadings | 3.77 |  |  |  |

Table 5: Factor Loadings for Confirmatory Factor Analysis with Target Rotation of APSI 1 Factor

Based on this analysis I determined that items one, two, four, five, seven and eight may be a factor on their own whilst item six, being a negative worded item and item three which talks about beliefs were not getting the same underlying factor as the rest of the items. I therefore conducted an EFA with only these six items.  for that model was 9 with a  = 125.49, p < .000; CFI =.97, TLI = .951, RMSEA = 0.106 [90% CI = 0.09 0.122]. Although the fit as it related to the TLI was good the RMSEA was still high. All items loaded well onto one factor (see Table 6). This indicated that the remaining items, three, and six were causing problems in the overall fit of the measure and represented either an independent factor or multiple factors and would not fit neatly into an additional factor.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | ML1 | ML1.1 | ML1.2 | com |
| APSI 1 | **0.83** | 0.69 | 0.31 | 1 |
| APSI 2 | **0.77** | 0.59 | 0.41 | 1 |
| APSI 4 | **0.82** | 0.67 | 0.33 | 1 |
| APSI 5 | **0.68** | 0.46 | 0.54 | 1 |
| APSI 7 | **0.77** | 0.60 | 0.40 | 1 |
| APSI 8 | **0.81** | 0.65 | 0.35 | 1 |
| SS loadings | 3.67 |  |  |  |

Table 6: Factor Loadings for Exploratory Factor Analysis with Oblimin Rotation of APSI - 1 Factor without 3 and 6

I nonetheless conducted a Target Rotation (TR) to see if a two factor model could be made to fit the data using that method. I set items one, two, four, five, seven and eight onto one factor and items three and six onto the other. This analysis resulted in a decent yet not excellent fit to data.  for the model was 13 with a  = 87.26, p = <.000; CFI =.96, TLI = .9, RMSEA = 0.11 [90% CI = 0.1, 0.126. All items for factor one loaded well (see table 7). Item three had a loading of .98 on factor two. Item six however was still not loading well on the second factor (0.29) or on the first factor (-0.12). This indicated that items three (I have a set of basic beliefs and values that guide my actions and decisions) and six (I don't know where I fit in the world) represent distinct factors.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | MR1 | MR2 | h2 | u2 | com |
| APSI 1 | **0.84** | -0.05 | 0.69 | 0.31 | 1.01 |
| APSI 2 | **0.77** | -0.01 | 0.59 | 0.41 | 1.00 |
| APSI 4 | **0.83** | -0.04 | 0.67 | 0.33 | 1.00 |
| APSI 7 | **0.77** | 0.02 | 0.60 | 0.40 | 1.00 |
| APSI 8 | **0.83** | -0.06 | 0.66 | 0.34 | 1.01 |
| APSI 5 | **0.64** | 0.18 | 0.50 | 0.50 | 1.16 |
| APSI 3 | 0.05 | **0.98** | 1.00 | 0.00 | 1.00 |
| APSI 6 | -0.12 | 0.29 | 0.08 | 0.92 | 1.33 |
| SS loadings | 3.7 | 1.1 |  |  |  |
| MR1 | 1.00 | 0.26 |  |  |  |
| MR2 | 0.26 | 1.00 |  |  |  |

Table 7: Factor Loadings for Confirmatory Factor Analysis with Target Rotation of APSI - 2 Factors. Factor 1: 1, 2, 4, 5, 7, 8. Factor 2: 3, 6

Thus, I conducted a target rotation with one factor fit (see table 8) using items one, two, four, five, seven and eight as was suggested by previous analysis. TLI = 0.96, CFI = 0.97, RMSEA = 0.10 [90% CI = 0.08, 0.12]. Although the loadings were good the fit, with a RMSEA of 0.10, was less than optimal a CFA using a SEM framework (Lavaan) resulted in an identical fit.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | MR1 | MR1.1 | MR1.2 | com |
| APSI 1 | **0.83** | 0.69 | 0.31 | 1 |
| APSI 2 | **0.77** | 0.59 | 0.41 | 1 |
| APSI 4 | **0.82** | 0.67 | 0.33 | 1 |
| APSI 5 | **0.68** | 0.46 | 0.54 | 1 |
| APSI 7 | **0.77** | 0.60 | 0.40 | 1 |
| APSI 8 | **0.81** | 0.65 | 0.35 | 1 |
| SS loadings | 3.67 |  |  |  |

Table 8: Factor Loadings for Confirmatory Factor Analysis with Target Rotation of APSI, 1 Factor, 1: 1, 2, 4, 5, 7, 8

**Confirmatory Factor Analysis: APSI 2 Factors**

Upon analysing the items it became clear that there might be two underlying factors here. Three items, factor one, related to understanding of self and current purpose and the other three, factor two, related to future goals

Factor one: I have a definite sense of purpose in life (item 1), I have a firm sense of who I am (item 2), I have a clear set of personal values or moral standards (item 5). Factor two: I know what I want out of life (item 4), I have specific personal goals for the future (item 7), I have a clear sense of who I want to be when I am an adult (item 8).

The loadings were good (see table 9 and 12) and the fit was great.  for the model was 8.0,  = 22.038, p = 0.005, TLI = 0.992, CFI = 0.99, RMSEA = 0.043 [90% CI = 0.02, 0.65]. The correlation between the two factors was high (.91), this seems to indicate that people with a good sense of current purpose also seem to have goals for the future and know what they want out of life and vice versa.

|  |  |  |  |
| --- | --- | --- | --- |
| Factor | op | Veriable | Loadings |
| FeelingNow | =˜ | APSI 1 | 0.86 |
| FeelingNow | =˜ | APSI 2 | 0.80 |
| FeelingNow | =˜ | APSI 5 | 0.70 |
| Futuregoals | =˜ | APSI 4 | 0.84 |
| Futuregoals | =˜ | APSI 7 | 0.80 |
| Futuregoals | =˜ | APSI 8 | 0.83 |
| FeelingNow | ˜˜ | Futuregoals | 0.91 |

Table 9: Factor Loadings for Confirmatory Factor Analysis with Lavaan of APSI, Two Factors

**Second Order Model**

Since there was a high correlation between the two factors and a one factor model did not result in an optimal fit I then tried a to fit second order model (see table 10 and plot 1) to see if a second order factor of global purpose could account for the high correlations between other two factors. I fix variances of the latent variables to unity. The fit was very good as expected (see table 12)  for the model was 7.0,  = 22.038, p = 0.003, TLI = 0.990, CFI = 0.99, RMSEA = 0.043 [90% CI 0.022, 0.065] The correlation between the the second order factor and the other two factors was high (.95 and 96).

|  |  |  |  |
| --- | --- | --- | --- |
| Factor | op | Veriable | Loadings |
| FeelingNow | =˜ | APSI 1 | 0.86 |
| FeelingNow | =˜ | APSI 2 | 0.80 |
| FeelingNow | =˜ | APSI 5 | 0.70 |
| Futuregoals | =˜ | APSI 4 | 0.84 |
| Futuregoals | =˜ | APSI 7 | 0.80 |
| Futuregoals | =˜ | APSI 8 | 0.83 |
| Purpose | =˜ | FeelingNow | 0.95 |
| Purpose | =˜ | Futuregoals | 0.95 |
| Futuregoals | ˜˜ | Futuregoals | 0.09 |
| Purpose | ˜˜ | Purpose | 1.00 |

Table 10: Factor Loadings for Confirmatory Factor Analysis with Lavaan of APSI, Two Factors with Second Order Purpose Factor



Plot 1: Second Order Model

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Model |  |  | p-value | CFI | TLI | | RMSEA | SRMR |
| 2 factor Fit | 22.038 | 8.000 | 0.005 | 0.996 | | 0.992 | 0.043 [90% CI 0.022, 0.065] | 0.012 |
| Second Order Fit | 22.038 | 7.000 | 0.003 | 0.995 | | 0.990 | 0.048 [90% CI 0.026, 0.071] | 0.012 |
| Bi-Factor Fit | 7.322 | 3.000 | 0.062 | 0.999 | | 0.993 | 0.039 [90% CI 0.000, 0.076] | 0.006 |

Table 12: Goodness of fit measures for APSI: Two Factor Model, Second Order Model and Bi-Factor Model

**Bi-Factor Model**

I then tried to fit a bi-factor model with an orthogonal rotation which set all the factors correlations to zero. This resulted in a marginally better fit that was better than the 2 factor model and the second order model.  for the model was 3,  = 7.322, p = 0.062, TLI = 0.993, CFI = 0.999, RMSEA = 0.039 [90% CI 0.000, 0.076]. However, when we looked at the loadings (see table 14) we found that whilst the items loaded well on the global purpose factor many of them no longer loaded well on their individual factors, in fact only item two and seven were loading higher than 0.3 on their individual factors. Thus, while the bi-factor model is the best fit for the data as far a fit indices are concerned, it does not explain the data as well as the second order model does.

|  |  |  |  |
| --- | --- | --- | --- |
| Factor | op | Veriable | Loadings |
| FeelingNow | =˜ | APSI 1 | 0.19 |
| FeelingNow | =˜ | APSI 2 | 0.39 |
| FeelingNow | =˜ | APSI 5 | 0.27 |
| Futuregoals | =˜ | APSI 4 | 0.14 |
| Futuregoals | =˜ | APSI 7 | 0.43 |
| Futuregoals | =˜ | APSI 8 | 0.15 |
| Purpose | =˜ | APSI 1 | 0.82 |
| Purpose | =˜ | APSI 2 | 0.74 |
| Purpose | =˜ | APSI 5 | 0.65 |
| Purpose | =˜ | APSI 4 | 0.82 |
| Purpose | =˜ | APSI 7 | 0.75 |
| Purpose | =˜ | APSI 8 | 0.80 |

Table 14: Factor Loadings for Bi-Factor Model



Plot 2: Bi-factor Model

My conclusion therefore is that the second order factor is the best explains the data and that this shows that there is one global factor of purpose that can be explained by two other highly correlated factors one the explains current sense of purpose and coherence and the second that relates to having goals for one’s life and future.

**Discriminant Validity**

In order to check for validity, I conducted a discriminant and convergent analysis. For discriminant validity I tested the second-order two factor model together with ADSQII self-concept items testing academic self-concept in four domains: English, Math, Science and general school subjects. The results showed that none of the self-concept items correlated with the the global purpose item beyond 0.18. Whilst besides for English and Math all the other self-concept measures correlated with each other between .40 and .70. This showed that the purpose scale was distinct from the self-concept scale and was tapping a completely different construct.

|  |  |  |  |
| --- | --- | --- | --- |
| Factor | op | Veriable | Loadings |
| FeelingPurposeNow | =˜ | APSI 1 | 0.86 |
| FeelingPurposeNow | =˜ | APSI 2 | 0.80 |
| FeelingPurposeNow | =˜ | APSI 5 | 0.70 |
| Futuregoals | =˜ | APSI 4 | 0.84 |
| Futuregoals | =˜ | APSI 7 | 0.80 |
| Futuregoals | =˜ | APSI 8 | 0.83 |
| Purpose | =˜ | FeelingPurposeNow | 0.97 |
| Purpose | =˜ | Futuregoals | 0.93 |
| FeelingPurposeNow | ˜˜ | FeelingPurposeNow | 0.05 |
| Futuregoals | ˜˜ | Futuregoals | 0.13 |
| Purpose | ˜˜ | Purpose | 1.00 |
| English | ˜˜ | English | 1.00 |
| Math | ˜˜ | Math | 1.00 |
| Science | ˜˜ | Science | 1.00 |
| Subjects | ˜˜ | Subjects | 1.00 |
| Purpose | ˜˜ | English | 0.18 |
| Purpose | ˜˜ | Math | 0.15 |
| Purpose | ˜˜ | Science | 0.13 |
| Purpose | ˜˜ | Subjects | 0.17 |
| English | ˜˜ | Math | 0.24 |
| English | ˜˜ | Science | 0.40 |
| English | ˜˜ | Subjects | 0.68 |
| Math | ˜˜ | Science | 0.52 |
| Math | ˜˜ | Subjects | 0.69 |
| Science | ˜˜ | Subjects | 0.70 |

Table 15: Factor Loadings for Discriminant Analysis with Lavaan of APSI con- pared to Academic Self Concept

**Convergent Validity**

To test for convergent validity, we conducted a confirmatory factor analysis together with another purpose scale the MLQ-P and MLQ-S. We found a high correlation (.69) between the MLQ measure of purpose and the global APSI measure of purpose (see table 16). The searching for purpose scale (MLQS) did not correlate with the presence of purpose scale (MLQP) very highly (.16) similarly the MLQS correlated with the global purpose factor at .15. This verified that the APSI purpose scale is convergent with other scales that have been show to also measure the construct of purpose.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Factor | op | Veriable | Loadings |
| 1 | FeelingPurposeNow | =˜ | APSI 1 | 0.87 |
| 2 | FeelingPurposeNow | =˜ | APSI 2 | 0.80 |
| 3 | FeelingPurposeNow | =˜ | APSI 5 | 0.69 |
| 4 | Futuregoals | =˜ | APSI 4 | 0.84 |
| 5 | Futuregoals | =˜ | APSI 7 | 0.79 |
| 6 | Futuregoals | =˜ | APSI 8 | 0.82 |
| 7 | Purpose | =˜ | FeelingPurposeNow | 0.99 |
| 8 | Purpose | =˜ | Futuregoals | 0.92 |
| 9 | MLQP | =˜ | MLQ 1 | 0.79 |
| 10 | MLQP | =˜ | MLQ 4 | 0.81 |
| 11 | MLQP | =˜ | MLQ 5 | 0.76 |
| 12 | MLQP | =˜ | MLQ 6 | 0.81 |
| 13 | MLQP | =˜ | MLQ 9 | -0.38 |
| 14 | MLQS | =˜ | MLQ 2 | 0.80 |
| 15 | MLQS | =˜ | MLQ 3 | 0.75 |
| 16 | MLQS | =˜ | MLQ 7 | 0.74 |
| 17 | MLQS | =˜ | MLQ 8 | 0.74 |
| 18 | MLQS | =˜ | MLQ 10 | 0.80 |
| 35 | FeelingPurposeNow | ˜˜ | FeelingPurposeNow | 0.02 |
| 36 | Futuregoals | ˜˜ | Futuregoals | 0.16 |
| 37 | Purpose | ˜˜ | Purpose | 1.00 |
| 38 | MLQP | ˜˜ | MLQP | 1.00 |
| 39 | MLQS | ˜˜ | MLQS | 1.00 |
| 40 | Purpose | ˜˜ | MLQP | 0.69 |
| 41 | Purpose | ˜˜ | MLQS | 0.15 |
| 42 | MLQP | ˜˜ | MLQS | 0.16 |

Table 16: Factor Loadings for Convergent Analysis of APSI with MLQ-Present and MLQ Searching using Lavaan