Correlation of BIS BAS and PSWQ Measures

Intro:
A behavioral approach system (BAS) modulates appetitive behavior. A behavioral inhibition system (BIS) is said to modulate unpleasant motives, in which one moves away from something undesirable. The Penn State Worry Questionnaire (PSWQ) measures worry phenomena. Both of these measures have been correlated with similar physiological indices, arguing they are similar constructs. The objective of this study is to collect a large sample of college students’ self-report measures for worry and approach to test the dimensional correlations. In this study, we are specifically looking for the possibility of a correlation between BIS/BAS and PSWQ.

Methods:
In this study, we recruited 491 participants. The participants were primarily Georgia State university students who signed up through SONA. From the Qualtrics website they were asked to fill out demographic questions and several surveys including the Behavioral Inhibition System/Behavioral Approach System, Penn State Worry Questionnaire, Depression Anxiety Stress Scales, and Beck Anxiety Inventory. We had to omit the survey responses that were incomplete, under 400 seconds, taken on a mobile device, or had the same answers throughout. This criterion left us with 198 complete data sets. We analyzed the data in SPSS to see if there are any correlations between BIS/BAS scores and the PSWQ score.

Results:
The final set of subjects included 41 males and 157 females, with the ages ranging from 18 to 63 (with a median of 20). Of the participants, 163 reported English as their first language. We ran a bivariate correlation with the data set. There was a significant correlation with BIS and BAS total at $r=0.881$, $p<0.05$. There was positive correlation between BIS and BAS reward resulting in $r=0.690$, $p<0.05$. There was also a positive significant correlation between PSWQ and BIS at $r=0.246$, $p<0.05$. Also, there was a negative significant correlation between PSWQ and BAS fun measures which was at $r=-0.244$, $p<0.05$.

Discussion:
We expected that there would be a correlation between PSWQ and BIS/BAS. The correlations were weak, but never the less they showed us that the 2 questionnaires can somewhat measure the same concepts.