INTRODUCTION
An individual’s pain experience consists of many emotional determinants, one of which includes pain catastrophizing. Pain catastrophizing is an exaggerated, negative cognitive sentiment toward an actual or anticipated painful experience. Pain catastrophizing is a predictor of negative pain-emotional determinants, one of which includes pain catastrophizing. In another study, pain catastrophizers with temporomandibular syndrome experienced greater pain intensity, greater disability, and presence of depression at an 18-month follow-up. Pain catastrophizing is well documented in literature. In one study, pain catastrophizers with pain catastrophizing, researchers found that the underprediction of pain by the patient may allow catastrophizers to approach potentially painful situations with less anxiety or fear than if their pain expectations were accurate.

STUDY OBJECTIVE
As perceptions and emotions surrounding pain change over an individual’s lifetime, the objective of this study is to determine if there is an association between certain patient demographics and pain catastrophizing measurements.

WHAT THIS STUDY ADDS
Determining specific patient characteristics associated with pain catastrophizing could allow us to target high-risk patients and recommend strategies for coping skills and behavioral interventions designed to improve pain related outcomes and pain treatments.

METHODS
Following approval from the Institutional Review Board, we randomly administered the Pain Catastrophizing Scale (PCS) and an additional original questionnaire one day a week to chronic pain patients seen at the GW Spine and Pain Clinic between September 2012 and February 2014. All questions were answered on a voluntary basis. Patients were given the choice to opt out at any point during the study.

Data reviewed included patient age, gender, ethnicity, duration of pain, cause of pain, frequency of pain, employment status, interference with daily life, causing distress (anger, anxiety, sadness) and score on Pain Catastrophizing Scale (PCS). Total score on the PCS was then analyzed using Pearson’s Correlation Coefficient (r) to assess relationships between patient characteristics and PCS score.

Inclusion criteria included: Age >4 18, provides IRB approved informed consent, Chronic pain patient at the GW Spine and Pain Clinic, English speaking and able to read at a 6th grade level.

RESULTS
A total of 107 patients were enrolled in the study. Patients seeking disability had a moderate correlation between PCS score & average pain as well as between PCS score & distress. Patients working full time and those on disability had a moderate correlation between PCS score & average pain as well as between PCS score & distress. Although some were very close, no other factors were significant at this sample size.

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>Variable</th>
<th>Avg ± SD</th>
<th>r &amp; p values</th>
<th>Knowing Cause</th>
<th>Age</th>
<th>PCS Total</th>
<th>Avg Pain</th>
<th>Interference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Time</td>
<td>Distance</td>
<td>22.47 ± 15.02</td>
<td>r=0.97, p=0.001</td>
<td>Yes</td>
<td>7.18 ± 2.15</td>
<td>27.69 ± 13.86</td>
<td>7.22 ± 2.51</td>
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<tr>
<td>Part Time</td>
<td>Distance</td>
<td>25.09 ± 16.64</td>
<td>r=0.83, p=.0389</td>
<td>Yes</td>
<td>6.26 ± 2.13</td>
<td>23.16 ± 14.97</td>
<td>6.44 ± 2.85</td>
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<tr>
<td>Retired</td>
<td>Distance</td>
<td>7.54 ± 1.04</td>
<td>r=0.58, p=.0014</td>
<td>Yes</td>
<td>28.45 ± 15.55</td>
<td>7.57 ± 2.81</td>
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<tr>
<td>Unemployed</td>
<td>Distance</td>
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<td>36.37 ± 12.65</td>
<td>6.7 ± 2.5</td>
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<tr>
<td>Missing Data</td>
<td>Distance</td>
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<td>r=0.26, p=0.83</td>
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<td>48.4 ± 10.98</td>
<td>6.8 ± 2.6</td>
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</tbody>
</table>

ACKNOWLEDGEMENTS
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REFERENCES

DISCUSSION
Patients with a reliable source of income tend to have lower PCS scores, average pain and distress as compared to patients with no income or an unreliable source of income.

At this sample size, knowledge of cause of pain, ethnicity, sex and age did not correlate significantly with PCS score, average pain or interference with daily life.

FUTURE DIRECTIONS
Will seek IRB approval to continue the study to over 200 patients to increase our power with the goal to adequately represent the chronic pain population.

Future investigation will continue to look at correlations between pain catastrophizing and certain patient characteristics. In addition, we will investigate ways to best improve patient quality of life.