Rise & Safety of E-Cigs

- Current evidence suggests that e-cigarettes (Fig. 1) may be a healthier alternative to smoking, but still not without risks [1].
- A 2015 report shows there are currently 2.6 million adults in Great Britain using electronic cigarettes, of which approximately 1.1 million are ex-smokers.
- We assume that people would like to quit smoking and vaping altogether.

Understanding Vapers

- 249 respondents (223 male) aged between 15 and 67 (\(\bar{x} = 31.3, \ s = 11\)) answered web survey.
- 84.1% are ex-smokers.
- 84.7% used a third generation Mod device.
- 92.3% stated they vape both in- and outdoors.
- 44.1% used 3-6mg nicotine bottles.
- 24.9% refilled once a day.
- 46.2% vaped as a means to quit both smoking and vaping altogether.

We asked:
- whether respondents were aware of how much they vaped during the last week.
- whether they felt they lost track of how much they vaped on a given day.
- which grasping behavior (Fig. 2) most closely resembles how they hold their device.
- what feedback type would they find most helpful if they were attempting to quit vaping (Table 1).

Survey Insights

- Only 16% of respondents said they were not aware of how much they vaped in the last week.
- Only 20% stated they lost track of how much they vaped on a given day.
- Grasp C received the highest votes (220), followed by B (55) and A (27).

<table>
<thead>
<tr>
<th>Feedback Type</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison to number of smoked cigarettes</td>
<td>145</td>
</tr>
<tr>
<td>Comparison of vaping activity to other vapers</td>
<td>115</td>
</tr>
<tr>
<td>Vape counts per day/week/month</td>
<td>72</td>
</tr>
<tr>
<td>Such information would not help quitting</td>
<td>66</td>
</tr>
<tr>
<td>Vaping session counts per day/week/month</td>
<td>52</td>
</tr>
<tr>
<td>Locations of highest vape activity</td>
<td>39</td>
</tr>
<tr>
<td>Person(s) who I vape with</td>
<td>26</td>
</tr>
<tr>
<td>Other</td>
<td>26</td>
</tr>
<tr>
<td>Day/week/month with highest vape count</td>
<td>23</td>
</tr>
</tbody>
</table>

Table 1

Next Steps

- Form factor of VapeTracker, ensuring ergonomics, usability, and social acceptance.
- Role of ambient on-device feedback (using LEDs).
- Psychological models of behavioral change.
- Smart user-aware notifications.

Authors certify that they have no affiliations with or involvement in any organization or entity with any financial or non-financial interest in promoting or demoting e-cigarettes.