Across North America and Europe, there is a growing interest in improving student mental health and wellbeing within higher education settings (Byrd & McKinney, 2012; Goh & Chiu, 2009; Royal College of Psychiatrists, 2011; Storrie, Ahern & Tuckett, 2010). In response to survey findings indicating concerns regarding students’ emotional, social and mental health (American College Health Association, 2008, 2010), many colleges and universities are beginning to explore what they can do to enhance mental health and wellbeing among their students (Association of University and Colleges of Canada; 2012; MacKean, 2011). Recent work in this area has recognized that treatment and intervention methods should be complemented by broader and more holistic approaches to supporting student wellbeing (Association of University and Colleges of Canada; 2012; Byrd & McKinney, 2012; MacKean, 2011; Royal College of Psychiatrists, 2011; Warwick, Maxwell, Simon, Statham & Aggleton, 2006), and there is therefore a growing need for tools and programmes that look beyond addressing individual symptoms in order to understand contextual and settings-based impacts on student wellbeing. Because the principles and theoretical foundations of settings-based approaches to promoting health and wellbeing come from various different sources, there are a multitude of different terms that can be used to describe these. Some common terms include: campus ecology; whole school approaches; healthy settings; Health Promoting Universities and systemic approaches to campus mental health (Byrd & McKinney, 2012; Doherty & Dooris, 2006; MacKean, 2011; NAPSA, 2004; Rowe, Stewart & Patterson, 2007; Tsouros, Dowding, Thompson & Dooris, 1998; WHO, 2012). What these terms have in common is that they refer to initiatives that look beyond individual interventions, to consider what can be done systemically to create institutional and environmental conditions that support wellbeing.

Simon Fraser University’s (SFU) Health Promotion unit has adopted a systemic approach to health promotion which is modeled after the WHO Health Promoting University framework (Tsouros, et al., 1998; WHO, 2012). Through this work, theoretical understandings of systemic health promotion have been moved into action through the Healthy Campus Community Initiative. This initiative builds upon literature and best practice from workplace, elementary and secondary settings to impact wellbeing and student success systemically within higher education.

There is growing evidence from workplace and school settings that describes how psychosocial factors within learning and working environments can impact wellbeing in addition to other outcomes such as learning, student satisfaction and retention (Bond, Butler, Thomas, Carlin, Glover, Bowes & Patton, 2007; Cohen, 2006; California Education Supports Project, n.d.; McNeely, Nonnemaker & Blum, 2002; Morrison & Kirby, 2010; Rowe et al., 2007; Samra, Gilbert, Shain, & Bilsker, 2012; Shochet, Dadds, Ham, & Montague, 2006). These environmental determinants have significant correlations with long term...
wellbeing in addition to workplace satisfaction, engagement, employee turnover and overall organizational success (Hammond, 2004; Harter, Frank, Schmidt & Keyes, 2003).

In order to understand better how similar psychosocial determinants may be impacting student wellbeing within higher education settings, the Health Promotion unit at SFU partnered with researchers within the Faculty of Health Science to adapt the Guarding Minds @ Work survey tool so that it could be applied to the university context.

This tool was originally designed by researchers at the Centre for Applied Research in Mental Health and Addictions to measure psychosocial risk factors within the workplace environment. These psychosocial risk factors are aspects of the workplace environment that have been found to impact the psychological health of employees. The information collected with this tool helps employers make changes that improve the wellbeing of their employees and enhance the overall productivity and success of their workplace. By adapting this tool to the university context, it is hoped that information can be obtained about the psychosocial determinants of wellbeing within the university context so that changes can be made to benefit both students and the institution overall. This tool therefore provides a first step in understanding the factors within the systemic structures that can be altered to positively impact student wellbeing in higher education settings.

**Methods**

This project was carried out through the collaborative efforts of researchers within the Faculty of Health Sciences, and SFU’s Health Promotion unit.

The initial background literature review on the relevance of this tool within the higher education context was conducted by SFU Health Promotion. Ethics approval for the project was obtained by the Simon Fraser University Research Ethics Board.

The survey items for the university tool were adapted from the original Guarding Minds @ Work survey, and an attempt was made to keep the questions as similar as possible to the original.

Some changes were made in order to make the questions more relevant to the student experience. For example, questions related to “supervisor feedback” were reworded as “instructor feedback”. The adapted questions were reviewed by all collaborating parties before the data collection began.

Data were collected using a convenience sample of students registered in one of nine SFU courses including four upper division health science classes, two 200 level health science classes and three 200 level business classes. Instructors agreed to give bonus participation points to students who completed the survey, and all students within the selected classes were invited to participate. Informed consent was provided by all participants and the survey was administered online by Campus Labs, a survey support company that assists with SFU Student Services data collection. A total of 690 participants completed the survey, with a response rate of 73%. In completing the survey, participants chose between four possible response categories for each question: strongly agree, agree, disagree and strongly disagree.

In order to understand which psychosocial determinants within the campus environment are contributing most significantly to student wellbeing, questions were rank-ordered and then grouped into “areas of strength”, and “areas to improve”. Questions fell into the “areas to improve” group if 40% of the respondents chose “disagree” or “strongly disagree” as the response. Items in the “areas of strength” group were determined based on 20% or more of the responses being in the “strongly agree” response category. The “agree” responses were not included in the identification of areas of strength because there was no “neutral” or “unsure” response category available in the survey, and a response of “agree” was therefore likely to have been the default answer for those who did not feel strongly either way, making it a limited measure of true areas of strength.

**Results**

Of all 60 questions, 12 were identified as areas to improve and 14 were identified as areas of strength. The following pages show Table 1 which is a summary of the questions
and responses grouped into as areas of strength, areas to improve and remaining items.

Table 1. Survey questions and responses by areas to improve and areas of strength

<table>
<thead>
<tr>
<th>Q#</th>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My university is committed to minimizing unnecessary stress</td>
<td>4</td>
<td>32</td>
<td>52</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>My professors would say or do something helpful if I looked distressed</td>
<td>4</td>
<td>35</td>
<td>48</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>I feel supported at my university when I am dealing with personal or family issues</td>
<td>6</td>
<td>38</td>
<td>43</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>I can talk to my professors when I am having trouble maintaining work-life balance</td>
<td>7</td>
<td>38</td>
<td>43</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>My professors care about my emotional well-being</td>
<td>5</td>
<td>40</td>
<td>46</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>I have energy left at the end of most schooldays for my personal life</td>
<td>9</td>
<td>40</td>
<td>37</td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td>I can talk to my professors about the amount of work I have to do</td>
<td>7</td>
<td>44</td>
<td>42</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>Our university effectively handles &quot;people problems&quot; that exist between students</td>
<td>5</td>
<td>48</td>
<td>40</td>
<td>7</td>
</tr>
<tr>
<td>9</td>
<td>My professors promote work-life balance</td>
<td>8</td>
<td>48</td>
<td>37</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>My work at university is free from unnecessary interruptions and disruptions</td>
<td>7</td>
<td>49</td>
<td>36</td>
<td>8</td>
</tr>
<tr>
<td>11</td>
<td>Difficult situations at university are addressed effectively</td>
<td>5</td>
<td>52</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>I feel I am part of a community at university</td>
<td>12</td>
<td>47</td>
<td>31</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q#</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>As a student I know what I am expected to do</td>
</tr>
<tr>
<td>14</td>
<td>I am willing to give extra effort at university if needed</td>
</tr>
<tr>
<td>15</td>
<td>People from all backgrounds are treated fairly at our university</td>
</tr>
<tr>
<td>16</td>
<td>My university work is an important part of who I am</td>
</tr>
<tr>
<td>17</td>
<td>I have the social and emotional skills needed to do well at university</td>
</tr>
<tr>
<td>18</td>
<td>I am proud of the work I do at university</td>
</tr>
<tr>
<td>19</td>
<td>People treat each other with respect and consideration in our university</td>
</tr>
<tr>
<td>20</td>
<td>My university takes effort to prevent harm to students from harassment, discrimination or violence</td>
</tr>
<tr>
<td>21</td>
<td>I have the opportunity to advance within my university</td>
</tr>
<tr>
<td>22</td>
<td>Being a student at university makes good use of my personal strengths</td>
</tr>
<tr>
<td>23</td>
<td>I am committed to the success of my university</td>
</tr>
<tr>
<td>24</td>
<td>I have control over prioritizing tasks and responsibilities when facing multiple demands at university</td>
</tr>
<tr>
<td>25</td>
<td>All people in our university are held accountable for their actions</td>
</tr>
<tr>
<td>26</td>
<td>I have the opportunity to develop my &quot;people skills&quot; at university</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q#</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>My university offers services or benefits that adequately address my psychological and mental health</td>
</tr>
<tr>
<td>28</td>
<td>I receive feedback at university that helps me grow and develop</td>
</tr>
<tr>
<td>29</td>
<td>My professors appreciate my work</td>
</tr>
<tr>
<td>30</td>
<td>I am able to talk to my professors about how I do my work</td>
</tr>
</tbody>
</table>
Table 1. (continued) Survey questions and responses by areas to improve and areas of strength

<table>
<thead>
<tr>
<th>Q#</th>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>The amount of work I am expected to do at my university is reasonable</td>
<td>10</td>
<td>66</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>32</td>
<td>I enjoy my university</td>
<td>18</td>
<td>62</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>33</td>
<td>My professors encourage me to take my entitled breaks (e.g. lunch, reading break)</td>
<td>16</td>
<td>53</td>
<td>28</td>
<td>4</td>
</tr>
<tr>
<td>34</td>
<td>People at university show sincere respect for others’ ideas, values and beliefs</td>
<td>12</td>
<td>70</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>35</td>
<td>Leadership at my university is effective</td>
<td>10</td>
<td>63</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>36</td>
<td>My university enrolls students who fit well within the university</td>
<td>7</td>
<td>60</td>
<td>26</td>
<td>7</td>
</tr>
<tr>
<td>37</td>
<td>My professors are open to my ideas for taking on new opportunities and challenges</td>
<td>9</td>
<td>68</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>38</td>
<td>I am evaluated fairly for the work I do</td>
<td>11</td>
<td>70</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>39</td>
<td>I have some control over how I organize my work at university</td>
<td>19</td>
<td>68</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>40</td>
<td>I am able to reasonably balance the demands of university and personal life</td>
<td>11</td>
<td>60</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>41</td>
<td>I am informed about important changes at university in a timely manner</td>
<td>16</td>
<td>60</td>
<td>19</td>
<td>5</td>
</tr>
<tr>
<td>42</td>
<td>My university appreciates extra effort made by students</td>
<td>17</td>
<td>62</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>43</td>
<td>My opinions and suggestions are considered at university</td>
<td>9</td>
<td>58</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>44</td>
<td>I have the materials and resources needed to do my university work well</td>
<td>19</td>
<td>67</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>45</td>
<td>My university supports students who are returning after time off due to a mental health condition</td>
<td>11</td>
<td>64</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>46</td>
<td>My professors provide helpful feedback on my performance</td>
<td>10</td>
<td>59</td>
<td>26</td>
<td>4</td>
</tr>
<tr>
<td>47</td>
<td>Unnecessary conflict is kept to a minimum in our university</td>
<td>16</td>
<td>72</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>48</td>
<td>My professors believe that social skills are as valuable as other skills</td>
<td>18</td>
<td>61</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>49</td>
<td>My university values students’ ongoing growth and development</td>
<td>17</td>
<td>71</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>50</td>
<td>Our university celebrates our shared accomplishments</td>
<td>18</td>
<td>64</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>51</td>
<td>I am informed of important changes that may impact how my university work is done</td>
<td>17</td>
<td>63</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>52</td>
<td>I would describe my university as being psychologically healthy</td>
<td>10</td>
<td>66</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>53</td>
<td>People in my university have a good understanding of the importance of student mental health</td>
<td>9</td>
<td>56</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>54</td>
<td>Students and professors trust one another at my university</td>
<td>8</td>
<td>65</td>
<td>23</td>
<td>3</td>
</tr>
<tr>
<td>55</td>
<td>My university provides clear, effective communication</td>
<td>13</td>
<td>67</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>56</td>
<td>My university has effective ways of addressing inappropriate behavior by other students</td>
<td>11</td>
<td>69</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td>57</td>
<td>Hiring/promotion decisions regarding professors consider the &quot;people skills&quot; that are necessary</td>
<td>11</td>
<td>58</td>
<td>25</td>
<td>6</td>
</tr>
<tr>
<td>58</td>
<td>My professors value my commitment and passion for my studies</td>
<td>13</td>
<td>61</td>
<td>22</td>
<td>4</td>
</tr>
<tr>
<td>59</td>
<td>My professors encourage input from all students on important issues related to their studies</td>
<td>18</td>
<td>66</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>60</td>
<td>My university deals effectively with situations that may threaten or harm students (harassment, discrimination, violence)</td>
<td>18</td>
<td>71</td>
<td>9</td>
<td>2</td>
</tr>
</tbody>
</table>

Note: the percentages in this table may not sum to exactly 100% due to rounding.
Discussion

The results of this investigation provide important information that can help university staff and administrators understand which aspects of the psychosocial environment within a higher education context may be contributing most significantly to students’ experiences of wellbeing. This information contributes to a greater understanding of what changes need to occur within the higher education context to better support students’ overall wellbeing and success through a systemic and settings-based approach to health promotion.

The areas of strength identified in Table 1.0 provide information about what works well in creating settings that successfully support student wellbeing. The areas for improvement provide insight into what changes could be made to better support student wellbeing.

In analyzing the results, several relevant themes emerged in the data. The most prominent area to improve that emerged was the need for better support for student work-life balance. Three of the twelve questions identified as areas to improve dealt directly with work-life balance issues (see questions 4, 6 and 9) and an additional three questions reflected issues surrounding student workload management and stress (see questions 1, 2 and 7). These findings point to the need to explore whether more can be done to create psychosocial environments that reduce undue stress and support work-life balance for students in higher education.

Issues related to stress and work-life balance have received substantial attention in workplace literature and have been shown to affect wellbeing significantly as well as other employee and organizational outcomes (Dana & Griffin, 1999; Donaldson & Grant-Valone, 2001; Gropel & Kuhl, 2009; Samra et al., 2012; Van der Doef & Maes, 1999). Similarly, these issues have received significant attention in higher education literature (Robotham & Julian, 2006; Stixrud, 2012) and there is evidence that current levels of stress in higher education contexts are not optimal for learning and academic performance. For example, the National College Health Assessment data collected throughout North America have frequently reported that the most significant factor, that has a negative impact on students’ academic performance, is stress. Yet the top factor student’s report as being traumatic or difficult to handle is academics (ACHA, 2008, 2010). This evidence points to the need to explore what can be done to create institutional environments that stimulate learning and growth without causing undue stress and burnout. Further research should explore whether workplace policies and structures that support work-life balance could be adapted to higher education settings. In addition, research should explore what supportive factors within the environment enable students to thrive. In 1988, Johnson and Hall proposed that experiences of stress in the workplace are greatest during situations of high demand, low control and low support. Support in this case is articulated not as support for managing the stress but rather social and instrumental support in meeting the demands. This is an important distinction that has implications in terms of creating campus environments that are supportive of student wellbeing and success.

Another related theme that emerged in the data as an area to improve, relates to the degree to which students feel part of a supportive community at university. The following are examples of questions that reflect this theme: “I feel I am part of a community at university”, “My professors care about my emotional well-being “ and “I feel supported at my university when I am dealing with personal or family issues “ (see questions 3, 5 and 12). Questions 2 and 8 in the table above also reflect concerns around interpersonal interactions and social support. These findings suggest that universities should explore ways to create a more supportive and caring community within the institution. Many research articles from secondary schools, higher education and workplace settings have outlined the benefits of a sense of community and sense of connectedness in terms of individual wellbeing, but also in terms of student retention, learning and success (Bond et al., 2007; California Education Supports Project, 2009; Hoffman, Richmond, Morrow & Salomone, 2002; McNeely et al., 2002; Morrow & Salomone, 2002; McNeely & Sochet et al., 2006). Improving the sense of community within the institution may therefore be an important opportunity to benefit both student wellbeing and institutional outcomes.
With regard to the areas of strength, the results highlight that there are many positive ways of creating environments that support student wellbeing. Some of the identified areas of strength include ensuring students know what is expected of them (question 13) and effectively preventing situations that may threaten or harm students (see question 20). In this study, students also reported that people from all backgrounds are treated fairly at university and that people treat each other with respect and consideration (see questions 15 and 19).

One of the most prominent themes that emerged as an area of strength was students’ sense of engagement and personal commitment to their studies and university. Examples of questions which reflect this theme are: “I am willing to give extra effort at university if needed”, “my university work is an important part of who I am” and “I am committed to the success of my university” (see questions 14, 16 and 23). The strong positive responses to these questions reflect that students are engaged and committed to success both for themselves as individuals and for the institution overall. These findings are interesting in light of recent discussions in the literature regarding student engagement within higher education (Bryson, 2011; Kuh, 2003; Zepke & Leach, 2010) which suggest that it is important to distinguish between students engaging (which is an aspect of the students own motivation and agency) and engaging students (which is a reflection of the engagement opportunities created by the institution). The wording in the above mentioned questions are closely aligned with the concept of students engaging and indicate that students are highly motivated and committed to their studies and institution. These findings could contribute to an understanding of the emotional and cognitive aspect of student engagement, which are sometimes considered to be missing from more behavioural measures of student engagement such as the National Survey of Student Engagement (NSSE) (Axelson & Flick, 2011). Further studies should explore the circumstances under which students’ emotional and cognitive engagement translates into behavioural measures of student engagement and what barriers may prevent this from occurring. Furthermore, it would be beneficial to learn more about how institutions are engaging students and what aspects of the institutional environment contribute most significantly to students’ sense of engagement.

Limitations

There are a few limitations to this study that should be mentioned. It is possible that some questions may have taken on a slightly different meaning during the re-wording of the workplace questions to be relevant for the student context. For example, question 21, which refers to advancement opportunities, is not as relevant in the university context as it is in the workplace context because all students innately have the opportunity to advance at university based on the way that universities are structured. Advancement opportunities at university may therefore not have the same psychosocial benefits for students as they would in a workplace context where there are often financial incentives and recognition opportunities associated with advancement. Another limitation that should be noted is that the four-category response scale used does not include a neutral option. The agree option was almost always the highest percentage, and without a neutral option we suspect that neutral responses may have tended to fall into the agree category.

Follow-up qualitative exploration would be beneficial in order to explore in more depth the causes and consequences of certain psychosocial determinants on students’ lives and how these may be addressed within the higher education context.

Finally, it is important to note that although these findings point to some key themes that may be important to further explore within higher education contexts, these findings are based on a limited number of SFU Business and Health Sciences classes and more research is needed to determine whether similar findings would be found in other academic programmes and institutions.

The findings are not meant to provide a comprehensive list of areas of strength and areas to improve, but rather are intended to provide preliminary insight into some of the ways that higher education institutions can support wellbeing through a systemic approach.
Implications and Conclusions

This research builds upon literature from workplace and school settings and provides a first step in using a survey instrument to identify factors within the systemic structures of higher education contexts that can be altered to positively impact student wellbeing and student success. This information is potentially relevant to all higher education institutions interested in improving student wellbeing through a systemic and campus wide approach. SFU Health Promotion is committed to incorporating these results into the Healthy Campus Community initiative in order to improve the determinants of wellbeing at SFU. More broadly this has the potential to be adopted within a WHO Health Promoting University framework in order to create healthy campus communities that support student wellbeing and success.

References


National Association of Student Personnel Administrators (NASPA), (2004). Leadership for a Healthy Campus: An Ecological Approach for Student Success. NASPA Student Affairs Administrators in Higher Education.


