Ethical Considerations in Persuasive User Interface Design: Domestic Violence Online Help-Seeking

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ABSTRACT
This paper examines the ethical considerations in applying persuasive user interface design principles to influence survivors of Domestic Violence (DV) to utilise online help-seeking functionalities available through the use of Internet websites and mobile applications. We acknowledge that challenges to address ethical issues on current online help-seeking interfaces are complex, and engaging test users, who are DV survivors, requires sensitivity. Our intent here is to share and think critically of the convergence of ethics on persuasive design principles for DV survivors to seek help online.

Author Keywords
Ethics, persuasive technology, domestic violence, online help-seeking, user interface design

1. INTRODUCTION
Violence against women is a global public health phenomenon affecting an estimated one third of women across the world (WHO, 2013). Violence against women remains a worldwide reality and presents an on-going concern. Particularly, overwhelming is the high incidence of violence and homicide cases prevalent in Australia. More than one in three Australian women (34%) who have had an intimate partner have experienced violence from a partner or ex-partner (Mouzos and Makkai, 2004). Although in much smaller numbers, we acknowledge that men experience DV as well.

Australia’s National Plan to Reduce Violence Against Women and their Children 2010-2022 seeks to significantly reduce the violence and to sustain this reduction by the year 2022. The Second Action Plan’s Priority No.3 will focus on supporting innovative services and integrated systems, with actions to include building a first stop support for women and their children experiencing violence, based on ‘what works’, and developing national standards for telephone and online counseling services. A notable recent initiative include the enhancement of the website for the 1800RESPECT national emergency helpline (www.1800respect.org.au) to incorporate online counseling. Mobile applications like DAISY and AURORA provides ‘first door support’ to DV survivors seeking information and help via their mobile phones.

2. ONLINE HELP-SEEKING
Developing websites for DV survivors to get concise and relevant information online, and to quickly and easily seek help from websites, we need to examine ethical issues in addition to asking questions that include but are not limited to: What information should be made available? How should this information be made available? This joint research project between Deakin University and Monash University will examine and study the application of usability and persuasive user interface design principles for DV survivors to utilise online help-seeking functionalities using mobile apps, websites and social media. It is critical that potential users including survivors, family, friends, by-standers, neighbours and the public have access to easy to use, timely and appropriate information, resources and services in order to support women and children impacted by the violence and aid the reduction of the incidence of violence against women in the country. Research needs to be conducted to increase the use of online Internet technology and online information made available (Houston, et al., 2013), so that there is easy access to online help-seeking information and DV survivors have a choice around when they access it. Ready access to hand phones, emails, social media and exposure to global news

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make it possible for survivors and their support networks to have it when they want or need it.

3. PERSUADE TO SEEK HELP ONLINE
In designing website user interfaces, there is a need to ensure which design will enable ease of use and influence the user behavior during interaction. It is important to understand the dynamics of abuse, risks and safety planning, culturally specific information, regionally adaptable for the global community, and digitally available information with the ability to guide and persuade survivors to safeguard their risks of using the internet. Current cell phone tracking and stalking including cyberstalking techniques are often used by abusers to instigate fear and further isolate survivors. (Zaida et al., 2015, Alhusen et al., 2015, Scott et al., 2014).

Ethical responsibility rests upon user interface designers with a clear understanding of the dangers faced by DV survivors and the potential risks to their lives and those of their children. It is the design and connection of the available technologies, current communication tools and the understanding of online help-seeking behaviors and barriers facing DV survivors that can greatly benefit user interface designers. The understanding of the complexity facing DV survivors and the features of the current technology guided by the OHS behavior of survivors have the potential to prevent and reduce the rate of DV.

Critical questions such as what would ensure safety for survivors, and how to provide decision aid tools via internet can empower women and build their confidence to leave abusive relationships. (Zaida et al., 2015, Westbrook, 2007, Bruckman et al., 2011).

The ability to seek help using the technology is dependent on the survivors’ knowledge, computer skills, access, language ability and safety issues. Accessibility and the cost effectiveness of technology have a potential to reach survivors of domestic violence. (Alhusen et al., 2015).

4. ETHICAL PERSUASIVE DESIGN PRINCIPLES
Examining ethical issues is a key component of persuasive design. However, there is no easy answer to define what is ethical and what is not. Values vary from one culture to the next, offering no easy answer that will satisfy everyone, and no single ethical system or set of guidelines which will serve in all cases (Fogg, 2003). In today's online world, DV websites face challenges to ensure that different types of support are available in relation to domestic violence, both preventative and after an incident of domestic violence (Hester and Westmarland, 2006). In order to be effective, websites and mobile applications with domestic violence information need to be comprehensive, up-to-date, accurate and usable, and support the needs of potential users. Therefore, understanding how to ethically influence survivors to browse and benefit from information/support on the mobile apps and websites becomes increasingly important to social services, police, healthcare or other content providers. How efficiently, safely and easily the survivors interact with the user interface is essential for the success of DV related mobile applications and websites. It is critical for survivors to recognize warnings signs, manage risk of potential dangers of the abuse, plan for the safety of their children and themselves, and have access to timely and appropriate information and help.

The ethical challenges that the project team face in the design of persuasive interfaces, is how best to enact an influence on the DV survivor to seek help online; which is likely to encompass the process of reporting to the police, and/or seeking health and social services.

Using Australian Bureau of Statistics (ABS) data, the NSW Bureau of Crime Statistics and Research (BOCSAR) found that less than half of all respondents who had experienced a domestic assault in the previous 12 months reported the incident to the police.

An even smaller number of women who experienced violence sought help from a specialised agency. In one study only 16 per cent of women who experienced intimate partner violence contacted an agency such as a shelter, crisis centre or hotline, counsellor or women’s centre (Mouzos and Makkai, 2004).

However, those who had experienced violence from some other male (not their partner or previous partner) were even less likely to seek assistance from one of these agencies, with only 9 per cent making contact with any kind of specialised agency.

The repercussion of a successful influence and change of behavior include scenarios such as: What if the online help-seeking website interface persuaded the DV survivor to contact a social service organisation to seek advice? And the perpetrator finds out about it, leaving the DV survivor in more danger than before. Or, simply surfing the web to seek help, the DV survivor overlooked deleting the websites visited from the history list. DV survivors who are less internet savvy may not know of this capability and not delete the list, leaving anyone else (possibly the perpetrator) to lookup the history list, putting the DV survivor in a difficult situation to explain why these websites are being visited.
In presenting the contact listing of domestic violence help agencies, what particular sort order should the listing be arranged? Should the listing be sorted with government linked agencies at the top or should it be the privately sponsored agencies, assuming both have equal expertise in helping the DV survivor. Or should there be a single contact point? Which will inevitably link the help-seeking DV survivor to an appropriate social services agency? These and other ethical considerations are paramount in considering the design of persuasive user interfaces, which not only influence the help-seeking behavior but also ensures that good and tested principled guidelines are implemented in any persuasive user interface design.

In Figure 1, we considered the ethical principles of persuasive design of Berdichevsky and Neunschwander, (1999), and the research work of LaMendola and Krysik, (2008), to document the ethical challenges we face in the design of DV online help-seeking. Their work explored the convergence of ethics of persuasion and the ethics of technology. They viewed persuasion as an intentional effort to change attitudes or behavior and technology as the direct application of abstract ideas. And hence they argued that any deviation from a rule-based approach, increases the risk

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<tr>
<th>Ethical Principles of Persuasive Design</th>
<th>Corresponding DV Online Help Seeking Scenario</th>
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<tr>
<td>1. Equivalency:</td>
<td>Help seeking using online technology can now be explored for DV survivors living in rural or remote areas. It can be seen as an extension of current help seeking using traditional paths like face-to-face or phone calls, where we can use websites and mobile apps as a medium.</td>
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<td>2. Motivation:</td>
<td>DV survivors can be motivated to seek help traditionally after browsing for help services information online and can identify which social service agency will be appropriate based on location, expertise, faith etc.DV survivors may be motivated to seek help and proceed to contact directly via phone call or make a personal visit to the organisation.</td>
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<td>3. Responsibility:</td>
<td>In designing the online live counseling tool e.g. LiveCHAT, designers have to take responsibility that there will always be someone authorised to offer help on the other end. They can build login and user authorisation modules to ensure only responsible persons are logged in to offer help to DV survivors.</td>
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<td>4. Privacy:</td>
<td>Websites have the ability to log user data, navigation patterns, and surfing behaviors. At times when DV survivors enter personal information such as age, gender, location etc., their privacy must be upheld at all times.</td>
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<td>5. Personal Protection:</td>
<td>During online form submissions by DV survivors, personal information has to be verified and scrutinized to ensure data privacy; especially in cases where the information is relayed to 3rd parties such as the police, health departments or social service agencies.</td>
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<td>6. Disclosure:</td>
<td>In designing the website user interface, consideration must be given to the placement of appropriate messages, information, images, icons and other interface elements to ensure the true intent of assisting DV survivors to seek help from various help agencies.</td>
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<td>7. Accuracy:</td>
<td>Online help seeking information has to be safe, accurate and enable DV survivors in dangerous situations to seek safety pathways and information.</td>
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<td>8. Reciprocation:</td>
<td>As the golden rule of persuasion, interface designers have the responsibility of ensuring that no such persuasion is encouraged of DV survivors using the online help seeking interface, which they would not want to be persuaded of.</td>
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**FIGURE 1:** Ethical Principles of Persuasive Design for DV Online Help Seeking
Adapted from [Berdichevsky and Neunschwander, 1999] & [LaMendola and Krysik, 2008]
factors and results in an ethical problem. In the design of user interfaces which influences behavior change and intended outcomes, the user interface designer takes paramount responsibility in ensuring ethical outcomes. Berdichevsky and Neunschwander’s study further defines the levels of ethical responsibility associated with predictable and unpredictable, intended and unintended consequences, for which the web designer have to be held responsible. Before we start pointing fingers at who is to be blamed and held responsible, we aligned and further propounded the 8 ethical principles of persuasive design in Figure 1.

5. CONCLUSION
In conclusion, the convergence of persuasive user interface design and ethics needs to be looked at critically, especially with more websites coming online to offer online help-seeking to DV survivors. The role of the user interface design team now sees increasing responsibilities in ensuring ethical considerations in designing user interfaces for online help seeking.

6. ACKNOWLEDGEMENT
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7. REFERENCES


communication technology (ICT) or computer mediated communication (CMC) on the level of violence and access to service among intimate partner violence (IPV) survivors in Canada. Technology in Society, 41, 91-97.