



Help-seeking Online by Young People: Does the Influence of Others Matter?

Alexander Stretton^{a1}, Barbara A. Spears^a, Carmel Taddeo^a, Judy Drennan^b

^a School of Education, University of South Australia, Australia

^b National Cheng Kung University, Tainan, Taiwan

Help-seeking is an adaptive process whereby a person seeks external support for a problem. Help-seeking early in response to mental health concerns is thus important in preventing mental illness in later life. Recent developments in service provision such as online help services, have been identified as promoting help-seeking behaviours, but there are many barriers that work against a young person seeking effective help early on, including personal characteristics such as attitudes toward help sources. Further, the influence of others on a young person's help-seeking behaviours is beginning to emerge in the youth help-seeking literature, and may be an important facilitator of help-seeking behaviours. The present mixed- method study explored young people's attitudes toward help sources, and how receptive young people are to the influence of others on their help-seeking intentions. Critically, the study aims to determine whether these variables have varying effects on different types of help sources (formal, informal and online). It was found that the influence of others and attitudes toward help sources had little bearing on online help-seeking intentions, in contrast to help-seeking intentions from traditional modes of help-seeking. Recommendations are made as to how young people can be better informed about the benefits of online help-seeking, with the hopes of highlighting the potentially untapped resource of other people's influence on a young person's decision to seek help online.

Keywords: mental health, youth, help-seeking, online, attitudes.

First Submission December 15th 2017; Accepted for publication April 14th 2018

¹ Corresponding author. Email address: alex.stretton@ahaconsulting.com.au

Introduction

Opinions about the internet and the online/digital space continue to be polarizing. Andrew Keen (2014, n.p) recently stated the internet is 'decimating our culture ...compounding unemployment ...turning us into data,

[and is] turning us into the product'. Hinkson (2013, p. 60) on the other hand, takes a more cautious approach, stating that 'optimism about and/or reliance upon technology is [both] a symptom and a reality of our times', and suggests we need to be wary of 'techno-salvation': the idea that technology will be able to fix everything. In the youth mental health field, research and practice may have already arrived at this 'techno-salvation' conclusion.

Several authors thus call for the tempering of excitement surrounding online services and what they can realistically deliver (Burns & Birrell, 2014; Hagen, Collin, Metcalf, Nicholas, Rahilly & Swainston, 2012). Yet they maintain that technologies will play a vital role in the future of mental health service provision and youth help-seeking intentions and behaviours, particularly if they are developed in concert with young people and integrated with existing services. This view has also been advanced in: reviews of emerging online services (Rickwood, 2012); research on young people's attitudes toward online service delivery (Bradford & Rickwood, 2012); and research on the efficacy of online services in facilitating youth help-seeking (Kauer, Mangan, & Sancu, 2014). As noted by Glasheen, Shochet, & Campbell (2016), technology and the internet may have a significant role to play in the contemporary youth mental health service provision field, but its success may depend on its ability to integrate with current services, rather than isolate itself from them.

Sources of help

Help-seeking is a coping process whereby a person attempts to seek external assistance for a problem. It can be further characterised by the various sources from which a young person can seek help. These may be formal sources of help (e.g. a professional counsellor), informal sources (a friend or family member) or an online help source (Kauer, Mangan & Sancu, 2014). The advent of online help-seeking services has introduced a more anonymous, potentially cost friendly and appealing method of seeking help, particularly for young people already embedded in an online ecosystem (e.g. social media, mobile applications) (Burns et al., 2013), and for young people who may experience stigma when seeking help from more traditional formal sources (Wallin, Maathz, Parling & Hursti, 2018). While there remain appealing aspects of online help-seeking, there is evidence to suggest that young people still may prefer traditional forms of help-seeking (Bradford & Rickwood, 2012).

Drivers of youth help-seeking

A key driver of help-seeking in response to mental ill-health is the influence of others on an individual's help-seeking behaviours (Rickwood, Mazzer & Telford, 2015). External influence may also include whether the young person knows someone close to them who has also sought help (Disabato, Short, Lameira & Bagley, et al., 2017). Whether a young person is influenced by someone close to them may depend as much on the other person's ability to recognise distress and recommend seeking help (Lubman, Cheetham, Jorm & Berridge, 2017) and the young person's receptiveness to that recommendation. The latter assertion, however, has received little attention in the youth help-seeking literature.

Another aspect important in the help-seeking process is a young person's attitude toward help sources. Attitudes toward help sources have been shown to play a proximate role in help-seeking intentions (Mojtabai, Evans-Lacko, Schomerus & Thornicroft, 2016; Wei, Hayden, Kutcher, Zygmunt & McGrath, 2013). The extent to which the influence of others is dependent upon a young person's positive perception of help sources is yet to be explored in the youth help-seeking literature. It may be the case that a young person's openness to the influence of others may be dependent upon how positively they perceive the help source being recommended. Further, the variation in this hypothesised relationship between help sources (online, formal, informal) may inform how we educate young people about help sources, and how we develop services moving forward.

Methodology

The present mixed methods study explores the relationship between openness to external influences on help-seeking; attitudes toward help sources; and intentions to seek help from informal, formal and online sources of help. The study draws upon a cross-sectional survey of young people aged 16-24 (n=243) and interviews (n=17) with young people that explore their attitudes toward online help-seeking.

Design and Approach

The study was approved by the relevant human research ethics committee and employed a mixed methods design, underpinned by a Critical Realist view of ontology and epistemology. In a Critical Realism approach (Bhaskar, 1979), the researchers acknowledge that reality does exist (the Real), is expressed through the

Actual (what appears to be ‘reality’ at any given point of time) and can be observed and/or experienced through the Empirical. This reality pre-exists social actors (in this case, young people), however social actors mould, reproduce and transform this reality.

Participants

Participants (n=243) were drawn from a diverse pool of sources including a school and several university campuses situated in Adelaide, Australia, and online via social media and email lists. ANOVA tests were conducted on the three recruitment methods which revealed no significant differences between recruitment methods on the study variables. The survey sample consisted of a male cohort (33.7%, n = 82) and 161 females (66.3%). The majority of the sample (84.3%) were born in Australia, with 15.7% born overseas, a majority of the sample (89.6%) indicated that English was their first language, and a small minority of the sample (1.2%, n = 3) identified as Aboriginal and/or Torres Strait Islander, below the national average of 2.5% (Australian Bureau of Statistics, 2011). Participants from the survey sample self-selected to participate in follow-up interviews and comprised 10 female and 7 male interviewees. Of the 17 interviews, 5 interviewees identified as international students.

Measures

Youth Help-Seeking Influence Scale (YHSIS, Self-constructed). The YHSIS was developed to explore/assess how open a young person is to the influence of various sources. Whilst some recent research has evaluated *who* influences young people to seek help (Rickwood, Mazzer & Telford, 2015), this research does not consider whether the young person was coerced or resisted this influence, or as open to it (Pescosolido, Gardner & Lubell, 1998). The YHSIS seeks to understand how open a young person is to various outside influences, identifying which sources may need further development in terms of influencing positive mental health behaviours. The measure asked participants ‘*how likely would you be to seek help for a personal problem or a mental health issue if the following person or source were to encourage you to do so?*’ with the options: boyfriend/girlfriend; friend (not related to you); parent/carer; brother/sister; other relative/family member; teacher; family doctor; sporting coach; online website; television advertisement; and mobile application. Participants responded to a 5 point Likert scale ranging from 1 (very unlikely) to 5 (very likely). Scores ranged from 5 to 50, higher scores reflected greater openness to positive influence of others on

mental health help-seeking. Cronbach's alpha for the YHSIS in the current study was .72, indicating adequate internal consistency.

Attitudes toward Seeking Help Sources Scale (ATSHS). The ATSHS was a self-constructed scale created to explore/measure attitudes toward informal and formal help-seeking sources, and more specifically how helpful the individual feels each source may be in addressing their mental health concerns. The measure asked the participant to rate the extent to which they felt the following people or services might be helpful in addressing mental health issues: Boyfriend/girlfriend; friend (not related to you); parent/carer; brother/sister; professional at school (e.g. school counsellor); family doctor; professional outside of school (e.g. psychologist or psychiatrist); phone help line (e.g. Kids Help Line, Lifeline); and online help from a professional (e.g. web counselling). Scores range from 5 to 50 with higher scores reflecting more positive beliefs around treatment efficacy with regard to help sources. Cronbach's alpha for this scale was .69, indicating borderline internal consistency. It has been suggested that for initial scale development and analysis alpha levels lower than .7 may be acceptable in initial research (Bacon, 2004).

General Help-Seeking Questionnaire (GHSQ). The GHSQ was created as a measure of 'future help-seeking behavioural intentions' (Wilson, Deane, Ciarrochi, & Rickwood, 2005, p. 6) and assesses intentions related to both formal and informal sources of help. For the current study the stem '*If you were having a personal or emotional problem, how likely is it that you would seek help from the following people*' was used along with the following response options: Intimate partner (e.g. girlfriend, boyfriend, husband, wife); friend (not related to you); parent; other relative/family member; teacher at school; mental health professional (e.g. psychologist, social worker, counsellor); phone helpline (e.g. Lifeline, Kids Help Line); Doctor/GP; minister or religious leader (e.g. Chaplain, Priest, Rabbi); and an online website (e.g. BeyondBlue, Headspace, online counselling). Participants were able to select their level of intention to seek help from each source on a scale from 1 to 7 labelled as: 1 (extremely unlikely), 3 (unlikely), 5 (likely) and 7 (extremely likely). Scores ranged from 7 to 70, with higher scores representing a greater intention to seek help. Cronbach's alpha for the present study was .73, evidencing adequate internal reliability. Creators of the GHSQ have noted that it can be used as a single composite measure when investigating overall help-seeking intentions (Wilson, Deane, Ciarrochi, & Rickwood, 2005), however as the present study also intended to investigate informal and formal help-seeking intentions the GHSQ was split into separate sub-scales which represented both formal and informal

help-seeking options. Furthermore, the single online help-seeking question was examined independently to investigate young people's intentions to seek help online.

Data Analysis

All inferential statistics were analysed in the SPSS program (IBM, 2011). AMOS (Arbuckle, 2006) was used to conduct mediation analysis using the Preacher and Hayes (2008) bias corrected bootstrapping method, a method which has shown to be superior over the traditional Baron and Kenny (1986) method of mediation analysis (Hayes, 2009).

A semi-structured interview schedule was adopted in this study. As participants (n=17) responded to questions a minimal number of probe questions were asked during the interviews to obtain further insight, detail and information. A semi-structured interview protocol was utilised to ensure that the participants' construction of reality and perceptions concerning the subject matter could be explored comprehensively, rather than tying responses to a strict schedule of questions. Whilst this method can be inflexible to making direct comparisons between participants, there is much more scope to explore each participant's unique experiences (Minichiello, Aroni & Hays, 2008; Walton, 2016). The interview protocol aimed to explore knowledge, attitudes and behaviours of young people with regard to specific mental health services in Australia. These included online and offline sources of help a young person may contact when experiencing ill-mental health.

Interview transcripts were analysed using the Interpretative Phenomenological Analysis (IPA) method (Smith & Osborn, 2003). IPA serves as a tool to 'explore in detail how participants are making sense of their personal and social world' (Smith & Osborn, 2003, p. 51) and involves exploring the varied experiences participants may have had and the meanings behind those experiences with regard to the research questions being investigated. IPA was first introduced in health psychology research (Smith, 1996) with varying foci including the patient's perception of causes and experience of heart disease (Senior, Smith, Michie, & Marteau, 2002), how genetic testing alters perceptions of illness (Chapman & Smith, 2002) and more recently the lay experience of depression in childhood and adolescence (McCann, Lubman, & Clark, 2012). IPA as a method of inquiry is often underpinned by semi-structured interview processes with emphasis on using minimal probes, allowing for the participant to respond naturally to questions, not rushing them or

interrupting, and being aware of how questions may be affecting the interviewee by observing non-verbal communication and responses to questioning (Smith & Osborn , 2003).

Results

Quantitative results

Missing value analysis and normality screening

Missing values analysis was conducted on the current dataset to determine the level of missing data and whether the data was missing at random. A non-significant result was returned, $\chi^2(7268) = 7226.56, p = .633$, indicating that data was likely to be missing completely at random. Missing data for single items ranged from 0% to 9.1% with an overall average missing data rate of 1.5%. Given: data from the current dataset could be argued to be missing completely at random and the relatively low level of missing data, stochastic regression techniques were used to impute missing values (Schlomer, Bauman & Card, 2010). Data were screened for normality for the whole sample (n= 243) on the following items: GHSQ, YHSIS and ATSHS. All scales were normally distributed based on the visual inspection of histogram and Q-Q plots, and observation of skewness and kurtosis values.

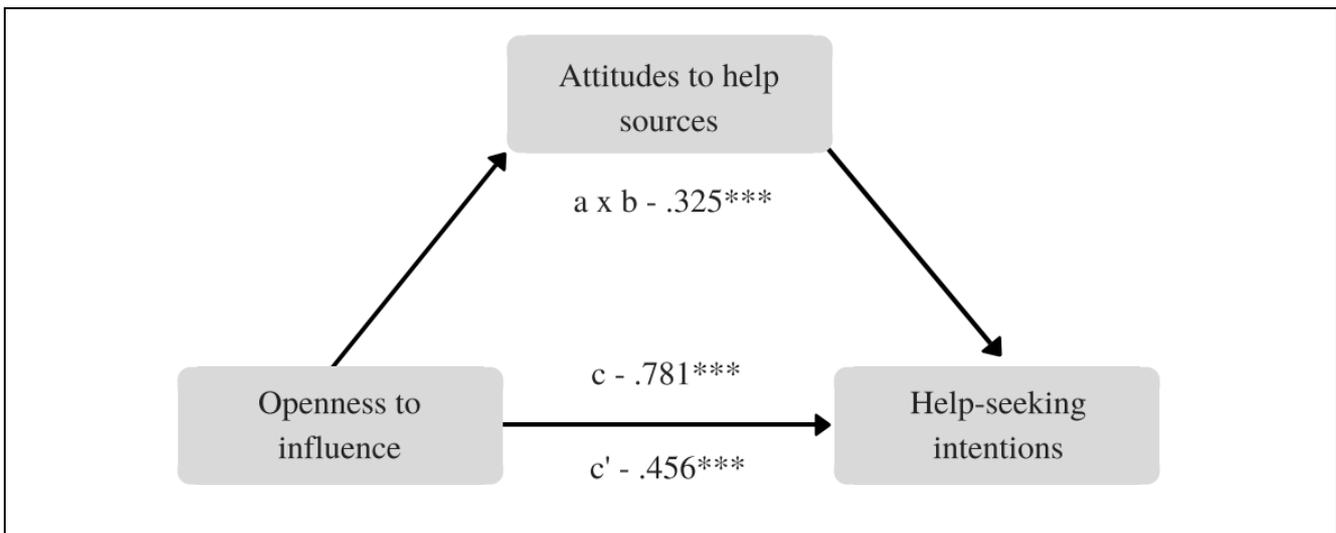
Mediation analyses

A series of analyses were conducted which examined the role of attitudes toward help sources in the relationship between openness to influence on help-seeking and help-seeking intentions. Analyses were run separately for the full GHSQ, informal, formal and online GHSQ sub-scales and item. The Preacher and Hayes (2008) method of mediation analysis was employed and 5,000 bootstrap re-samplings with bias-corrected 95% confidence intervals for indirect effects were requested through the AMOS software. Table 1 displays each mediation model along with the total effects path (c), direct effects path (c'), indirect path (a x b) and 95% confidence interval. Probability values are supplied in brackets for each pathway coefficient.

In the full GHSQ model (Figure 1), attitudes toward help sources evidenced a complimentary (partial) mediating role between openness to influence on help-seeking and overall intentions. In other words, being open to the influence of others resulted in a greater intention to seek help overall, a relationship that was partially dependent on the individual holding positive attitudes toward help sources.

Table 1. Mediation analyses with full GHSQ, informal and formal sub-scales and online help-seeking intentions

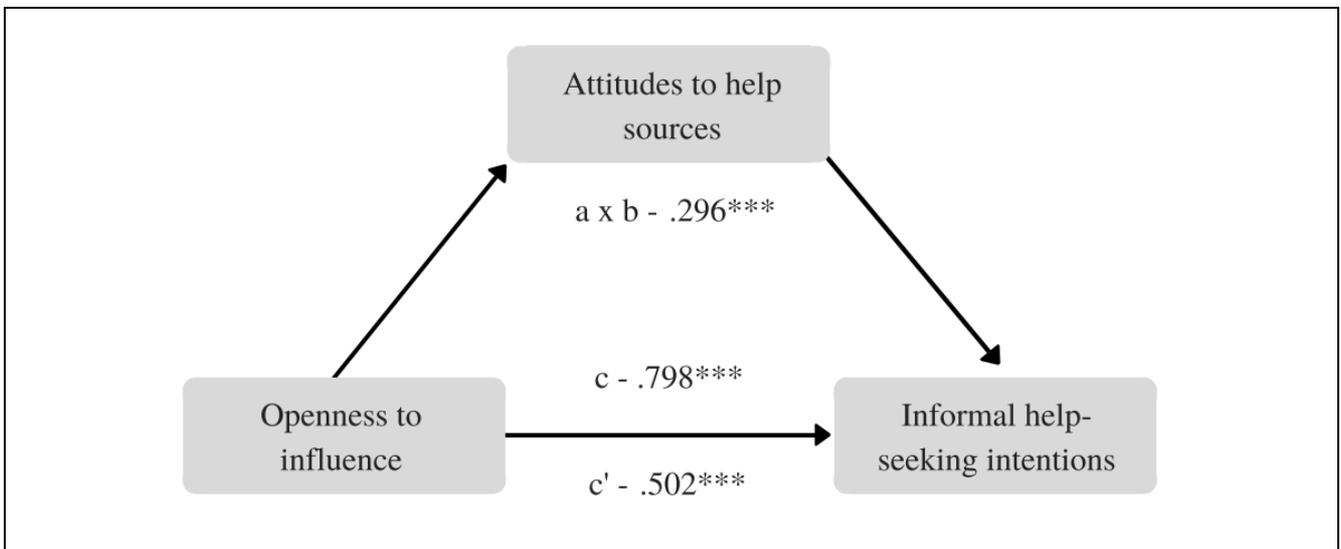
Model	Total (c)	Direct (c')	Indirect (a x b)	95% CI
GHSQ	.781 (.000)	.456 (.000)	.325 (.001)	.172 - .550
Informal	.798 (.000)	.502 (.000)	.296 (.001)	.131 - .519
Formal	.540 (.000)	.244 (.046)	.296 (.003)	.123 - .558
Online	.227 (.002)	.108 (.348)	.119 (.124)	-.039 - .301



*** Significant at the .001 level

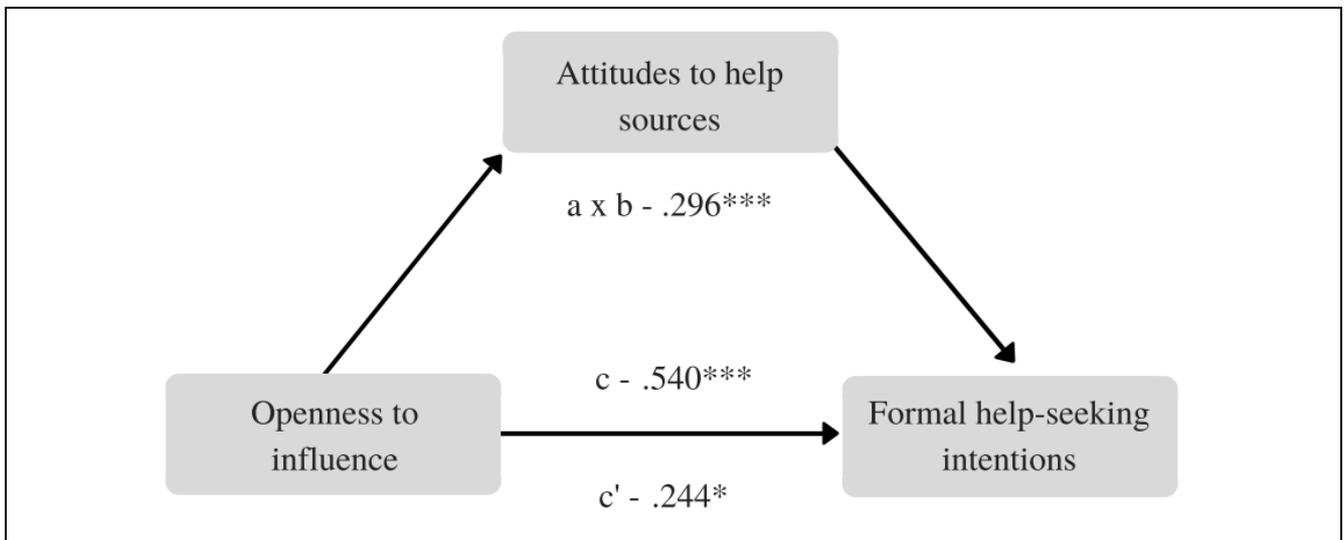
Figure 1. Mediation pathway with full GHSQ as outcome

Similar mediation trends were observed for both informal (Figure 2) and formal (Figure 3) mediation models. In the case of the formal help-seeking mediation model, attitudes toward help sources almost completely mediated the relationship between openness to influence and formal help-seeking intentions, highlighting the importance of a young person’s positive perception of formal help.



*** Significant at the .001 level

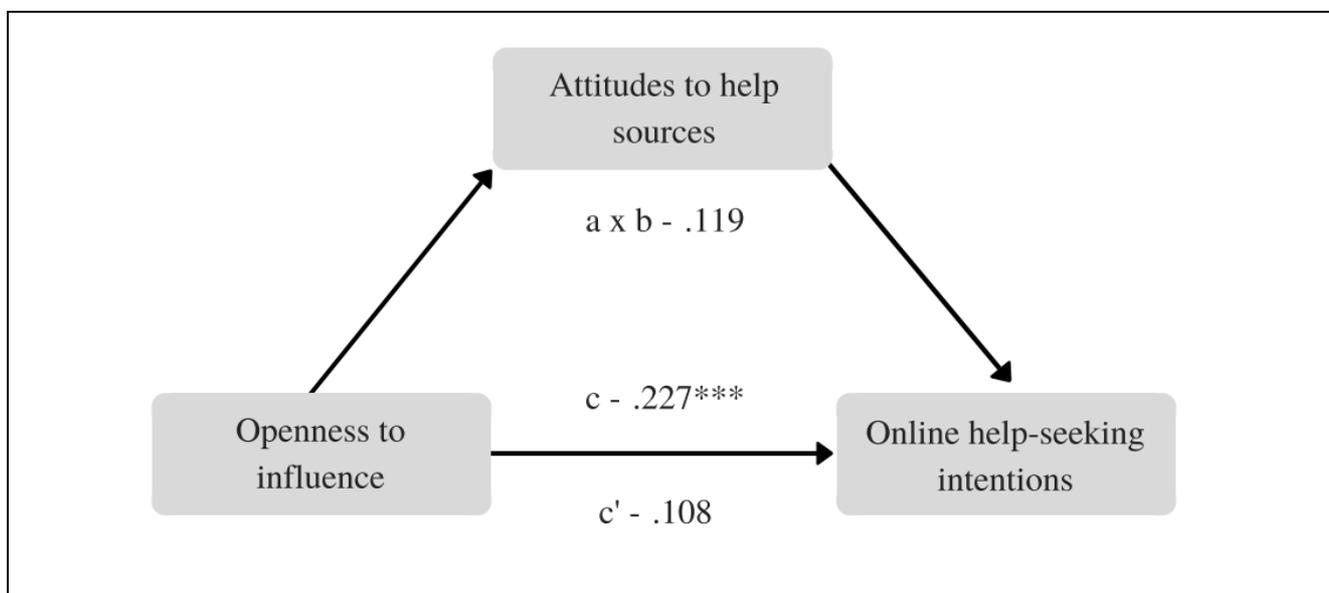
Figure 2. Mediation pathway with informal help-seeking intentions as outcome



* Significant at the .05 level; *** Significant at the .001 level

Figure 3. Mediation pathway with formal help-seeking intentions as outcome

Finally, the online help-seeking mediation model (Figure 4) evidenced what Zhao, Lynch & Chen (2010) term ‘no effect non-mediation’. In this case, neither direct nor indirect effects were observed, highlighting the differences between traditional and online methods of help-seeking. This suggests that seeking help online may not rely on the young person holding a positive attitude of the online help source, nor on the influence of people close to them that may suggest seeking help online.



*** Significant at the .001 level

Figure 4. Mediation pathway with online help-seeking intentions as outcome

Qualitative findings

Across the interview sample there were diverse opinions as to how young people perceived online mental health services. Major themes emerging from the interview data included: negative perceptions of online services (lack of security, a de-personalised experience, doubts as to the effectiveness of an online service); positive perceptions of online services (online services acting as a ‘foot-in-the-door’ to other services, anonymity and cost-effectiveness); and the varying perceptions of what seeking help online entailed. Quotes are coded as follows: Sex; Age; and whether the interviewee was an international student and represent common concerns rather than individual views.

Concerns around security, de-personalisation and effectiveness

Some concerns revolved around the potential for security breaches when using online services, particularly as one may be transmitting sensitive and personal information:

Ummm, well sure it has accessibility but ummm, I’m honestly not too sure about the security because ummm, there’s online security breaches and things like that (F, 19, Int)

A number of international student participants raised this technological issue and noted that they would prefer face-to-face interactions. This is an interesting juxtaposition with the general view that online services afford the user greater anonymity than face-to-face services, particularly as a young person does not

need to physically walk into a clinic or physical health service (Rickwood, 2010; Young, Richards, & Gunning, 2012), (yet given the nature of online security breaches, this anonymity was ultimately questioned.

Several participants made comments reflecting concerns with personalisation and genuineness of online services:

Um, probably because they might not feel like the information they are getting is really personalised so I guess you can go online and look for facts and you can probably get help but it's not the same as actually having a conversation with someone (F, 22)

This was also reflected in another comment, outlining why they thought a person might be hesitant to seek help through online platforms:

It is, it is, and also I suppose, wondering whether it would be effective, you know, wondering who are these people that I'm talking to, are they trained? Are they qualified? Are they even going to help, what's going to be the point, is there any use joining the forum? Or um, yeah, is it going to help me? If I was in a really bad state, will this actually help me to come out of that? That would be one of the things that would prevent me from doing that (M, 24)

Personal contact and conversing with a human being was valued over connecting through digital interfaces. Beyond this, another participant raised the issue that online counselling may not be as effective when compared with traditional counselling practices:

um, I don't know, I mean I'm looking at ReachOut.com and thinking, I don't know how I feel about online counselling, if I wanted to see a counsellor I think I'd want to sit in front of them and because I think there is so much to be gained from body language, from facial expressions and a lot of things that cannot be gained online. And also I think if you're... the word 'impression management' comes to mind...if someone is already hesitant to talk about it online, they might try to de-escalate and make it seem less, make it into something, maybe that it isn't. So then they wouldn't be getting the help they really need because (F, 22)

Service limitations were primarily raised by local student participants and highlighted the divide between face-to-face and online services when considering the ability for a counsellor and client to *connect* through development of a therapeutic relationship or alliance. Indeed, concerns about this very issue have been investigated with Dowling and Rickwood (2013) surmising a number of factors influencing whether online counselling is able to foster the therapeutic relationship, including client and service-based characteristics.

Whilst recent research is shedding further light in this field (Dowling & Rickwood, 2016), there is a need for further understanding of the ability for e-counselling to foster a therapeutic relationship (Sucala, Schnur, Constantino, Miller, Brackman, & Montgomery, 2012). The views of the young people in the present study would suggest some trepidation about the ability of e-counselling to foster such a connection between client and practitioner, and this may be one explanation of low proportions of young people reporting intentions to seek counselling online (Bradford & Rickwood, 2012).

'Foot-in-the-door', anonymity and cost benefits

While some attitudes toward help-seeking online were negative and sceptical, others presented a more positive outlook. Participants remarked that online help-seeking could act as an initial step in working toward traditional help-seeking behaviours:

Yeah I think so I think it could even provide a foot in the door effect as well, if they were able to do this sort of a little anonymous counselling they might feel better about then stepping into someone's office (M, 24)

This bridging step was echoed by another participant who said that seeking help-online can overcome the fear of *seeking help from a face-to-face organisation or source, particularly those with social anxiety*:

I think online activities you can sort of ease yourself into the helping process, whereas if you have to go to lifeline and book an appointment with a counsellor... 'ohhh shit I have to go meet this person and' especially if you have people with social anxiety or people who are withdrawn, like the example you gave before then that makes it extremely hard for them (F, 20)

Others were a bit more straightforward in their response, praising the ability for an individual to remain anonymous when seeking help-online:

Accessible, more confidential, pseudonyms, they can do that whole ‘well my friend is going through this sort of scenario’ um, I just think it’s a bit easier for them to disguise who they are (F, 24)

Knowledge and beliefs about what seeking help online looks like

Another interesting finding was how the participants understood seeking help online. Responses ranged from help-seeking online being a task of gathering more information about what an individual may be experiencing (passive help-seeking), to active forms of help-seeking such as engaging a counselling service or interacting with others in online forums. One participant illustrated how they saw online help-seeking as a passive behaviour:

Oh I absolutely do, I think that, I think people; we do Google, even personally, I’m noticing a trend I do think even casually people type in to google in their spare moment ‘feeling overwhelmed what is?’ even just something simple and then what pops up might be an organisation such as headspace or reach out and they might click there and have a brief look (F, 24)

In the above quote the participant makes reference to ‘Google’ and using it as a tool for information seeking, though explicitly states Headspace (Headspace, 2018) and ReachOut (ReachOut, 2018) as sites where young people might take a brief look. Other participants made explicit reference to online forums and online counselling as a valuable form of active help-seeking online:

Yeah, but I suppose I think with the other ones if ReachOut has forums and headspace if it is face to face it’s like, forums can be really good coz you can kinda share your experience and know that there are other people out there suffering with the same thing and you know get an idea of what helps and what doesn’t (F, 24)

Discussion

The mediation analyses explored whether attitudes toward help sources mediated the relationship between openness to influence and help-seeking intentions consistently between formal, informal and online help

sources. Attitudes toward help sources evidenced complementary mediation when the full GHSQ scale was the outcome measure. In this case, attitudes strengthened the relationship between openness to influence and intentions, though openness to influence did retain its unique and significant contribution to intentions. A similar complementary mediation model was observed with informal help-seeking intentions as the outcome. The formal help-seeking outcome model also evidenced complementary mediation, however, attitudes toward help sources came close to completely mediating the relationship between openness to influence and formal help-seeking intentions. This suggests that when considering formal help options for ill-mental health, attitudes toward help sources are important, particularly if an individual is being recommended formal help from a friend, family member, or being influenced by various media sources. Findings from the current study suggest that in order for the influence of others to be effective, the young person would need to hold positive attitudes toward formal help sources, e.g. to feel they would be helpful in addressing their concerns.

Finally, attitudes did not mediate the relationship when online help-seeking intentions was the outcome. The lack of mediation by attitudes toward help sources in the online model suggests that online help-seeking may be a unique process separate from seeking help from a person (whether formal or informal). It appears that the influence of others also has little effect on online help-seeking intentions (when accounting for attitudes toward help sources), and thus seeking help online may be a behaviour that young people more readily engage in without external influence. The anonymous nature of online help-seeking may also explain why influence of others was not a strong predictor in the mediation model focusing on online help-seeking intentions. Young people may be more likely to independently access online help because they can do so without telling their friends or family.

Triangulation of quantitative and qualitative findings

When taking into account the qualitative findings regarding online help-seeking, it is not surprising that the influence of others on online help-seeking intentions played no role in the mediation model. For many interviewees, the online help-seeking process was viewed primarily as an information gathering process, not requiring the need to interact with another person, a finding echoed elsewhere in the literature (Naslund, Aschbrenner, Marsch & Bartels, 2016) This passive form of help-seeking online may lower the stakes and make it easier to 'seek help' without the need for external influence or even the need to hold positive attitudes toward seeking help online.

Further, participant reports of online help sources being valuable for their anonymity align with the quantitative findings. It is possible that by virtue of online help sources being anonymous, a young person accessing help online may be less likely to be speaking to those close to them about their mental health concerns. Therefore, their close confidants may be unable to recommend help in the first place due to not knowing about the young person's concerns.

The finding that online help sources were perceived as a 'foot-in-the-door' to more traditional face-to-face services also aligns with the quantitative findings. A similar sentiment was found in a study by Ellis, Collin, Hurley & Davenport (2013) on young men who saw online help as a stepping stone to face-to-face services. Online help may be an action undertaken at the early stages of the help-seeking process, before close friends or family are consulted for recommendations on where to seek help. This aligns with much of the literature which asserts that young men often rely on themselves in the early stages of mental illness for support (Heath, Brenner, Vogel & Lannin, 2017).

In contrast to the positive attitudes toward help-sources, the negative aspects identified by interviewees add insight into the quantitative findings. The finding that online help-seeking was sometimes seen as being unable to address mental health concerns due to a lack of personalisation and the challenges surrounding the ability to develop a rapport with the client, suggest that participants may view seeking help online as an under-developed and ineffective way to seek help, a concern echoed in the literature (Downling & Rickwood, 2013; 2016).

Some participants had concerns about the technology mediated format of online counselling, where clients could minimise their concerns and avoid transmitting body language to a counsellor, potentially influencing how a counsellor proceeds with treatment and evaluates the client. These are consistent with concerns raised by practicing counsellors (Reeves, 2014) and a recent review of text based e-counselling services (Lee, Kumar & Leung, 2017). Hopefully this will be addressed in promising proposed research on video-audio distance counselling randomised controlled trials (Ciuca, Berger, Crişan, & Miclea, 2016) Due to these concerns, it may be the case that irrespective of the influence of others, these negative attitudes override the influence of others on intentions to seek help in the online setting.

Implications for education and online help source development

For educators and mental health practitioners, the present study offers a number of practical implications to consider. A young person's view on what seeking help online entails varies considerably. For some, seeking help online involves passively gathering information (Neal, Campbell, Williams, Liu & Nussbaumer, 2011), for others, it may be a more interactive form of help-seeking involving online counselling. This has implications when educating young people about sources of help available to them on the internet. Careful consideration by educators and those promoting mental health help-seeking online to young people is required to communicate effectively the benefits of various online services. This is particularly the case in order to assuage concerns identified in this study associated with online counselling.

The rate at which online help sources are being rolled out may pose a problem to instilling confidence in young people that what they are accessing will be beneficial for them (Lee, Kumar & Leung, 2017) despite findings that some forms of therapy delivered online are as efficacious as their face-to-face counterparts (Andersson, Cuijpers, Carlbring, Riper & Hedman, 2014). It is recognised that it is becoming increasingly difficult for young people to know what will work for them (Rickwood, 2012). It then becomes more important than ever that young people are appropriately educated regarding what they can expect when seeking help online, particularly as the format overcomes the significant barrier of stigma that young people face when in need of mental health support (Wallin, Maathz, Parling & Hursti, 2018). This may include increased levels of transparency on clinical outcomes for online mental health programs (Rice, Gleeson, Leicester & Bendall, 2018), and/or teacher led discussion of validated online services in social and emotional education curricula (Freeman & Strong, 2017).

What was clear in the present study is that seeking help online may have entirely different proximate predictors when compared with formal and informal help-seeking. In the case of online help-seeking, the influence of others on young people's intentions to seek help online appeared immaterial, and rather seeking help online was potentially a way to get one's foot in the door and become comfortable with seeking more traditional forms of help. If this indeed is the case, focus on developing online sources of help that nudge young people toward traditional face-to-face services may prove beneficial (Spears et al., 2016). It also may be the case that there is untapped potential in harnessing the influence of others on a young person's decision to seek help online. Therefore, increased transparency and knowledge around the effectiveness of online counselling may instil confidence in young people to recommend effective services to their friends.

Limitations

There were limitations to the present study which should be considered in light of the findings. Two of the scales in the present study were self-constructed and are exploratory in nature, and yet to be validated. Whilst their creation was necessary in order to explore the constructs of a young person's receptiveness to external influence and their beliefs about how helpful various help sources are, readers should be mindful of the exploratory nature of these scales.

Further, the GHSQ online help-seeking item may not adequately capture the diversity currently found in mental health online help sources. The present study would be strengthened by the use of a more diverse and holistic measure of online help-seeking intentions. Finally, the cross-sectional nature of this study prevents any causal relationships to be ascertained, and the directional relationship between variables in the mediation analysis may not necessarily represent a true relational pathway.

Conclusion

Overall, these findings support the extant literature around differentiating between help sources and the importance of designing mental health interventions and educative programs based on specific help sources (Blanchard, Hosie & Burns, 2013). Rickwood (2012) has stated that 'online interventions are developing so rapidly that it is increasingly difficult for users to make a well-informed choice' (p. 23), the present study supports this assertion, and views educators and mental health services as key players in guiding young people to sources of help that have clear benefits. When coupling this complexity of service availability with the myriad barriers that prevent a young person from seeking help, public health initiatives and targeted education campaigns need to be clear on what help services offer, how they treat mental health concerns and what an individual can expect when seeking support online.

Acknowledgements

This research was supported by the Young and Well Cooperative Research Centre.

References

- Andersson, G., Cuijpers, P., Carlbring, P., Riper, H., & Hedman, E. (2014). Guided Internet-based vs. face-to-face cognitive behavior therapy for psychiatric and somatic disorders: a systematic review and meta-analysis. *World Psychiatry*, 13(3), 288-295.
- Arbuckle, J. L. (2006). *Amos* (Version 7.0). Chicago: SPSS.
- Bacon, D. (2004). The contributions of reliability and pretests to effective assessment. *Practical Assessment, Research & Evaluation*, 9(3).
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173.
- Bennett, D. A. (2001). How can I deal with missing data in my study? *Australian and New Zealand Journal of Public Health*, 25(5), 464-469.
- Bhaskar, R. (1979). *The possibility of naturalism: A philosophical critique of the contemporary human sciences* (4th ed.). New York, NY: Routledge.
- Blanchard, M., Hosie, A., & Burns, J. (2013). Embracing technologies to improve well-being for young people: An Australian view of evidence and policy implications. In A. Robertson, R. Jones-Parry & M. Kuzamba (Eds.), *Commonwealth health partnerships* (pp127-132). Cambridge: Nexus Strategic Partnerships.
- Bradford, S., & Rickwood, D. (2012). Adolescent's preferred modes of delivery for mental health services. *Child and Adolescent Mental Health*, 19 (1), 39-45. doi: 10.1111/camh.12002
- Burns, J., & Birrell, E. (2014). Enhancing early engagement with mental health services by young people. *Psychology Research and Behavior Management*, 7, 303-312.
- Burns, J. M., Davenport, T. A., Christensen, H., Luscombe, G. M., Mendoza, J. A., Bresnan, A., Blanchard, M. E., & Hickie, I. B. (2013). *Game on: Young men's mental health and wellbeing. Findings from the first young and well national survey*. Melbourne: Young and Well Cooperative Research Centre.
- Chapman, E., & Smith, J. A. (2002). Interpretative phenomenological analysis and the new genetics. *Journal of Health Psychology*, 7(2), 125-130.
- Ciuca, A. M., Berger, T., Crişan, L. G., & Miclea, M. (2016). Internet-based treatment for Romanian adults with panic disorder: Protocol of a randomized controlled trial comparing a skype-guided with an

unguided self-help intervention (the paxpd study). *BMC Psychiatry*, 16(1), 1-16. doi: 10.1186/s12888-016-0709-9

Disabato, D. J., Short, J. L., Lameira, D. M., Bagley, K. D., & Wong, S. J. (2018). Predicting help-seeking behavior: The impact of knowing someone close who has sought help. *Journal of American College Health*, 1-9.

Dowling, M., & Rickwood, D. (2013). Online counseling and therapy for mental health problems: A systematic review of individual synchronous interventions using chat. *Journal of Technology in Human Services*, 31(1), 1-21. doi: 10.1080/15228835.2012.728508

Dowling, M., & Rickwood, D. (2016). Exploring hope and expectations in the youth mental health online counselling environment. *Computers in Human Behavior*, 55, Part A, 62-68. doi: <http://dx.doi.org/10.1016/j.chb.2015.08.009>

Ellis, L. A., Collin, P., Hurley, P. J., Davenport, T. A., Burns, J. M., & Hickie, I. B. (2013). Young men's attitudes and behaviour in relation to mental health and technology: Implications for the development of online mental health services. *BMC Psychiatry*, 13(1), 1-10. doi: 10.1186/1471-244X-13-119

Freeman, E., & Strong, D. (2017). Building teacher capacity to promote social and emotional learning in Australia. In Erica Frydenberg, Andrew Martin & Rebecca Collie (Eds.) *Social and Emotional Learning in Australia and the Asia-Pacific* (pp. 413-435). Springer, Singapore.

Glasheen, K. J., Shochet, I., & Campbell, M. A. (2016). Online counselling in secondary schools: Would students seek help by this medium? *British Journal of Guidance & Counselling*, 44(1), 108-122.

Hagen, P., Collin, P., Metcalf, A., Nicholas, M., Rahilly, K., & Swainston, N. (2012). *Participatory design of evidence-based online youth mental health promotion, intervention and treatment*. Melbourne: Young and Well CRC.

Hayes, A. F. (2009). Beyond baron and kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408-420.

Headspace (2018). *Welcome to Headspace*. Last retrieved on 12th April 2018 from Accessed at

<https://headspace.org.au>

Heath, P. J., Brenner, R. E., Vogel, D. L., Lannin, D. G., & Strass, H. A. (2017). Masculinity and barriers to seeking counseling: The buffering role of self-compassion. *Journal of counseling psychology*, 64(1), 94-103.

- Hinkson, J. (2013). Why do we place our hope in technology?: A secular faith? *Arena*, 41/42, 59-92.
- IBM. (2011). *IBM spss statistics for windows* (Version 20). Armonk, NY: IBM Corp.
- Kauer, S. D., Mangan, C., & Sancu, L. (2014). Do online mental health services improve help-seeking for young people? A systematic review. *Journal of Medical Internet Research*, 16(3): e66 doi: doi:10.2196/jmir.3103
- Keen, A. (2014) *The Internet is not the answer*. *Techonomy*. Last retrieved on 10th March 2018 from <https://techonomy.com/conf/te14/global-challenges/internet-answer-2/>
- Lee, M., Kumar, R., & Leung, R. (2017). The doctor is online: An introduction to text-based telepsychiatry. *UBC Medical Journal*, 8(2), 8.2 (33-35).
- Lubman, D. I., Cheetham, A., Jorm, A. F., Berridge, B. J., Wilson, C., Blee, F., ... & Proimos, J. (2017). Australian adolescents' beliefs and help-seeking intentions towards peers experiencing symptoms of depression and alcohol misuse. *BMC Public Health*, 17(1), 658.
- McCann, T. V., Lubman, D. I., & Clark, E. (2012). The experience of young people with depression: A qualitative study. *Journal of Psychiatric & Mental Health Nursing*, 19(4), 334-340. doi: 10.1111/j.1365-2850.2011.01783.x
- Minichiello, V., Aroni, R., & Hays, T. (2008). *In-Depth Interviewing* (3 ed.). Sydney, Australia: Pearson Education Australia.
- Mojtabai, R., Evans-Lacko, S., Schomerus, G., & Thornicroft, G. (2016). Attitudes toward mental health help seeking as predictors of future help-seeking behavior and use of mental health treatments. *Psychiatric Services*, 67(6), 650-657.
- Naslund, J. A., Aschbrenner, K. A., Marsch, L. A., & Bartels, S. J. (2016). The future of mental health care: peer-to-peer support and social media. *Epidemiology and Psychiatric Sciences*, 25(2), 113-122.
- Neal, D. M., Campbell, A. J., Williams, L. Y., Liu, Y., & Nussbaumer, D. (2011). "I did not realize so many options are available": Cognitive authority, emerging adults, and e-mental health. *Library & Information Science Research*, 33(1), 25-33.
- Peng, C. Y. J., Harwell, M., Liou, S. M., & Ehman, L. H. (2006). Advances in missing data methods and implications for educational research. In S. Sawilowsky (Ed.), *Real data analysis* (pp. 31-78). Greenwich, CT: Information Age.

- Pescosolido, B. A., Gardner, C. B., & Lubell, K. M. (1998). How people get into mental health services: Stories of choice, coercion and “muddling through” from “first-timers”. *Social Science & Medicine*, 46(2), 275-286. doi: [http://dx.doi.org/10.1016/S0277-9536\(97\)00160-3](http://dx.doi.org/10.1016/S0277-9536(97)00160-3)
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- ReachOut (2018). Welcome to ReachOut. Accessed at <https://au.reachout.com/> on February 12 2018.
- Reeves, N. (2014). The use of telephone and skype in psychotherapy: Reflections of an attachment therapist. *Love in the Age of the Internet: Attachment in the Digital Era*, 125.
- Rice, S., Gleeson, J., Leicester, S., Bendall, S., D'Alfonso, S., Gilbertson, T., ... & Santesteban-Echarri, O. (2018). Implementation of the Enhanced Moderated Online Social Therapy (MOST+) Model Within a National Youth E-Mental Health Service (eheadspace): Protocol for a Single Group Pilot Study for Help-Seeking Young People. *JMIR Research Protocols*, 7(2), e48.
- Rickwood, D. (2012). Entering the e-spectrum. *Youth Studies Australia*, 31(4), 18-27.
- Rickwood, D. J. (2010). Promoting youth mental health through computer-mediated communication. *International Journal of Mental Health Promotion*, 12(3), 32-44.
- Rickwood, D. J., Mazzer, K. R., & Telford, N. R. (2015). Social influences on seeking help from mental health services, in-person and online, during adolescence and young adulthood. *BMC Psychiatry*, 15(1), 40.
- Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Australian e-Journal for the Advancement of Mental Health*, 4(3), 1-34.
- Roth, P. L. (1994). Missing data: A conceptual review for applied psychologists. *Personnel Psychology*, 47(3), 537-560.
- Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, 7(2), 147.
- Schlomer, G. L., Bauman, S., & Card, N. a. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling Psychology*, 57(1), 1-10. doi: 10.1037/a0018082.sup
- Senior, V., Smith, J. A., Michie, S., & Marteau, T. M. (2002). Making sense of risk: An interpretative phenomenological analysis of vulnerability to heart disease. *Journal of Health Psychology*, 7(2), 157-168. doi: 10.1177/1359105302007002455

- Smith, J. A. (1996). Beyond the divide between cognition and discourse: Using interpretative phenomenological analysis in health psychology. *Psychology & Health, 11*(2), 261-271. doi: 10.1080/08870449608400256
- Smith, J. A., & Osborn, M. (2003). Interpretative phenomenological analysis. In J. A. Smith (Ed.), *Qualitative psychology: A practical guide to research methods* (pp. 51-80). London: SAGE Publications Ltd.
- Spears, B., Taddeo, C., Barnes, A., Collin, P., Swist, T., Webb-Williams, J., ... & Drennan, J. (2016). *Something Haunting You? Reframing and Promoting Help-Seeking for Young Men: The Co-Creation and Evaluation of a Social Marketing Campaign*. Melbourne: Young and Well Cooperative Research Centre.
- Sucala, M., Schnur, J. B., Constantino, M. J., Miller, S. J., Brackman, E. H., & Montgomery, G. H. (2012). The therapeutic relationship in e-therapy for mental health: A systematic review. *Journal of Medical Internet Research, 14*(4), e110.
- Wallin, E., Maathz, P., Parling, T., & Hursti, T. (2018). Self-stigma and the intention to seek psychological help online compared to face-to-face. *Journal of clinical psychology, 1-12*. DOI: 10.1002/jclp.22583
- Walton, P., Kop, T., Spriggs, D., & Fitzgerald, B. (2013). A digital inclusion: Empowering all australians. *Australian Journal of Telecommunications and the Digital Economy, 1*(1), 9.
- Wei, Y., Hayden, J. A., Kutcher, S., Zygmunt, A., & McGrath, P. (2013). The effectiveness of school mental health literacy programs to address knowledge, attitudes and help seeking among youth. *Early Intervention in Psychiatry, 7*(2), 109-121.
- Wilson, C., Deane, F., & Ciarrochi, J. (2005). Can hopelessness and adolescents' beliefs and attitudes about seeking help account for help negation? *Journal of Clinical Psychology, 61*(12), 1525-1539. doi: 10.1002/jclp.20206
- Young, M., Richards, C., & Gunning, M. (2012). Online mental health resources for teenagers: An evaluation of two websites developed for adolescents. *Advances in School Mental Health Promotion, 5*(4), 277-289. doi: 10.1080/1754730X.2012.736792
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering baron and kenny: Myths and truths about mediation analysis. *Journal of Consumer Research, 37*(2), 197-206.