

University of Nebraska - Lincoln

## DigitalCommons@University of Nebraska - Lincoln

---

Copyright, Fair Use, Scholarly Communication,  
etc.

Libraries at University of Nebraska-Lincoln

---

2021

### Introducing the Copyright Anxiety Scale

Amanda Wakaruk

*University of Alberta Library and Museums*

Céline Gareau-Brennan

*University of Alberta Library and Museums*

Matthew Pietrosanu

*University of Alberta*

Follow this and additional works at: <https://digitalcommons.unl.edu/scholcom>



Part of the [Intellectual Property Law Commons](#), [Scholarly Communication Commons](#), and the [Scholarly Publishing Commons](#)

---

Wakaruk, Amanda; Gareau-Brennan, Céline; and Pietrosanu, Matthew, "Introducing the Copyright Anxiety Scale" (2021). *Copyright, Fair Use, Scholarly Communication, etc.*. 209.

<https://digitalcommons.unl.edu/scholcom/209>

This Article is brought to you for free and open access by the Libraries at University of Nebraska-Lincoln at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Copyright, Fair Use, Scholarly Communication, etc. by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.



# Journal of Copyright in Education and Librarianship

ISSN 2473-8336 | jcel-pub.org

Volume 5, Issue 1 (2021)

## **Introducing the Copyright Anxiety Scale**

Amanda Wakaruk, Céline Gareau-Brennan, & Matthew Pietrosanu

Wakaruk, A., Gareau-Brennan, C., Pietrosanu, P. (2021). Introducing the Copyright Anxiety Scale. *Journal of Copyright in Education and Librarianship*, 5(1), 1–38.

<https://doi.org/10.17161/jcel.v5i1.15212>



© 2021 Amanda Wakaruk, Céline Gareau-Brennan, & Matthew Pietrosanu. This open access article is distributed under a [Attribution-NonCommercial 4.0 International \(CC BY-NC 4.0\)](https://creativecommons.org/licenses/by-nc/4.0/).

## Introducing the Copyright Anxiety Scale

Amanda Wakaruk

University of Alberta Library and Museums, Alberta, Canada

Céline Gareau-Brennan

University of Alberta Library and Museums, Alberta, Canada

Matthew Pietrosanu

Department of Mathematical and Statistical Sciences, University of Alberta,  
Alberta, Canada

Correspondence regarding this article should be addressed to Amanda Wakaruk,  
Copyright Librarian, University of Alberta, Edmonton, Alberta, Canada, T6G 2R3  
[amanda.wakaruk@ualberta.ca](mailto:amanda.wakaruk@ualberta.ca).

### Abstract

Navigating copyright issues can be frustrating to the point of causing anxiety, potentially discouraging or inhibiting legitimate uses of copyright-protected materials. A lack of data about the extent and impact of these phenomena, known as copyright anxiety and copyright chill, respectively, motivated the authors to create the Copyright Anxiety Scale (CAS). This article provides an overview of the CAS's development and validity testing. Results of an initial survey deployment drawing from a broad cross-section of respondents living in Canada and the United States (n = 521) establishes that the phenomenon of copyright anxiety is prevalent and likely associated with copyright chill.

*Keywords:* copyright, copyright anxiety, copyright chill, Copyright Anxiety Scale, copyright law, librarianship, libraries, research methods



## Introducing the Copyright Anxiety Scale

Copyright legislation is a public policy instrument that mediates the relationship between creators and consumers of copyright-protected works in most countries, including Canada and the United States. Historically, school curricula did not include copyright education, even up to and including most postsecondary programs. In addition, the representation of relevant case law in both traditional and social media channels is often focused on extreme cases with large monetary claims. Thus, the complexities of copyright legislation and its lay interpretations can present perceptual challenges that affect the efforts of both creators and consumers. The resulting frustrations and negative emotions that individuals might experience as they navigate copyright considerations are often described by copyright practitioners, educators, and librarians as *copyright fear, confusion, and/or anxiety*. Such anxieties might result in *copyright chill*, a situation in which a legitimate use of copyright-protected materials is discouraged or inhibited by the threat of legal action, real or perceived. Put another way, the sharing and reuse of original creative works and the creation of new works can be hampered by a lack of understanding and an abundance of nervousness about the interpretation of copyright law.

Although there is some academic and public discourse around the topic of copyright chill and its likely precursor, copyright anxiety, a review of the literature shows that attempts to quantifiably measure the perceptions, presence, and scope of copyright anxiety and chill in the general public are nonexistent. As academic librarians, two of the authors work with students, instructors, researchers, and administrators who variously amplify or dismiss the role of copyright anxiety and chill, which motivated the creation of a tool that would help identify and explore the phenomenon. Examples from the authors' professional experience in Canada include the following: university students being afraid of being monitored by "copyright police," instructors assuming high levels of infringement by students without direct evidence, and administrators dismissing a supportive fair dealing assessment when considering third-party content for inclusion in an open educational resource.

The research project documented in this paper will introduce the Copyright Anxiety Scale (CAS), share the results of its first deployment, and offer a preliminary assessment of its validity and reliability. These questions could be reframed as such:

- Does copyright anxiety exist and is it a problem?

- Can a valid and reliable instrument be developed to measure copyright anxiety?
- What can we learn from the results of this instrument's initial deployment?

### **Copyright Anxiety and Chill**

In theory, copyright's *raison d'être* is to provide a balance between incentivization for the creation of new works and the societal need to make those works available for the benefit of the public good. In this way, copyright as a policy instrument is supposed to benefit both users and creators of copyright-protected content. However, this balance is weighted decidedly in favor of rightsholders, and there is a definite perception that uses of copyright-protected materials are "at the whim of the owners (who can decide to sue or not to sue)" (Silbey, 2016, p. 866). Resulting anxieties about copyright are described as a context in which users fear "that everything they do violates the law instead of trying to find best practice in handling copyright issues" (Nilsson, 2016, p. 81). This escalation of the fear of copyright litigation to the point of deterring the use of resources, even if such uses are legally defensible, is described as copyright chill (Silbey, 2016).

Copyright issues can be pervasive, and the challenge of copyright anxiety does not bode well for researchers where copyright-protected materials figure heavily in content creation and consumption (Nilsson, 2016). For example, Aufderheide reported that in a 2009 study of copyright chill among communications researchers, "nearly a third avoided research subjects or questions and a full fifth abandoned research already under way because of copyright concerns" (2020, p. 3). In addition to the loss of potential research, the pedagogical costs of copyright confusion can include less effective teaching materials, distribution hurdles, and the perpetuation of misinformation (Hobbs et al., 2007).

While librarians have an obvious role to play in mitigating copyright anxiety and chill within their communities of users, they are also subject to both. It is well-documented that copyright can inspire avoidance behaviors and result in anxiety for librarians (Morrison & Secker, 2017; Benson, 2019), and that copyright "is seen as a 'difficult' area" (Nilsson, 2016, p. 78) within the profession.

To better understand the scope and nature of anxiety as it relates to copyright in the population that is meant to be served by related legislation, we

must first develop a tool that is designed to identify and measure it among the general public.

### **Other Anxiety Scales**

Scholars in the allied fields of education, psychology, and library and information studies have developed instruments to quantify individuals' anxiety, such as the Library Anxiety Scale (LAS) and the Depression Anxiety Stress Scale (DASS). Both scales informed the development of the CAS.

### **The Library Anxiety Scale (LAS)**

In 1992, Sharon Bostick developed the LAS as part of her doctoral work. She drew on conceptual explorations of information anxiety (Wurman, 1989), the use of information literacy programming to mitigate anxiety (Breivik & Gee, 1989), and, more notably, Constance A. Mellon's exploration and definition of library anxiety (1986).

"Can a valid and reliable instrument be developed to measure Mellon's theory of library anxiety?" (Bostick, 1992, p. 5) is the research question that informed the LAS development. To answer this question, Bostick used scales as the quantitative method, which are frequently deployed via self-report surveys to evaluate an individual's attitude toward a particular scenario. She described the relationship between these qualitative (the theory of library anxiety) and quantitative (LAS) explorations as an integrated and nonexperimental research design; "a valuable tool in social and educational research where the independent variables cannot be manipulated, but an area of inquiry needs to be studied" (Bostick, 1992, p. 42).

The development of the LAS was multipart and comprehensive:

Develop list of key components relating to library anxiety; Send to experts for validation; Examine responses for commonalities and contradictions; Restructure outline; Resend to experts; Link statements with list of key components; Send statements to experts; Develop pilot instrument; Test for readability and clarity; Edit statements based on test; Repeat until all clusters are complete; Run pilot test; Perform factor analysis and reliability; Edit instrument and retain the viable statements; Perform test-retest for accuracy (Bostick, 1992).

Following validity testing using a factor analysis, the final LAS included 43 items and was organized into five factors. Bostick (1992) concluded that "library anxiety in an academic library can be measured using the Library

Anxiety Scale” (pp. 82–83) and suggested both subsequent research in the field of library anxiety and practical applications in an academic setting to guide improvements to library services.

The LAS has had a significant impact and a meaningful legacy.<sup>1</sup> Notably, Onwuegbuzie et al. (2004) and McAfee (2018) have both built upon the scale, with the former outlining additional models and the latter foregrounding the emotion of shame as a natural part of the learning process. McAfee (2018) observed that social fears play a role in library anxiety and that when “shame is too compounded and paralyzing, the learning process is disrupted” (p. 252).

### **The Depression Anxiety Stress Scale (DASS)**

The DASS was developed by Peter F. Lovibond and Sydney H. Lovibond and provides “a set of three self-report scales designed to measure the negative emotional states of depression, anxiety and stress” (1996, p. 1). The anxiety measures, in particular, were used in the development of the CAS. In the context of the DASS, anxiety is defined in contrast to fear: “anxiety involves longer term anticipation of negative events which typically, but not exclusively, are psychological in danger” (Lovibond & Lovibond, 1996, p. 33).

Informed by more than 30 years of research, Lovibond and Lovibond described the scale development process as progressive, with five stages:

1. The initial check of the original 37 depression and anxiety items for intercorrelation;
2. A multiple group factor analysis that retained some items and did away with others;
3. The addition of the stress scale and fine tuning of all three scales together;
4. The application of the scales on a clinical sample of 152 psychiatric outpatients;
5. The scale discrimination, which included using and studying the scale in the context of nonclinical groups and practical situations.

The DASS is a self-administered questionnaire comprising 42 items. It is used widely in both research settings and private practice and is highly regarded for its accuracy and reliability (Szabó, 2009). Like the LAS, the DASS was designed to be used by researchers and practitioners for multiple purposes: to inspire further study of these emotional states and for practical applications in

---

<sup>1</sup> For a recent literature review, see Jan et al. (2016).

the field (Lovibond & Lovibond, 1996). The DASS has international renown and is available in more than 25 languages (Parkitny & McAuley, 2010).

### **Development of the Copyright Anxiety Scale (CAS)**

The CAS's development intentionally mirrors that of the LAS and DASS: creation of a draft scale, consultation with experts and peers, pretesting, revisions, initial deployment and analysis.

The initial items (that is, questions excluding demographic information) included in the CAS mimicked the structure and language of relevant LAS items, updated for the current digital environment. Additional items were added after reviewing the DASS and other copyright-related survey tools, bringing the total number of questions in the initial scale to 36. Specifically, questions related to copyright chill posed by the International Communication Association (2010), Kirwan Cox (2005), and Lisa Di Valentino (2019) were reviewed. Once an initial draft of the scale was created, two groups were consulted for feedback. First, scale development experts provided advice about specific questions and the overall arrangement of the scale. Second, graduate students in the University of Alberta's School of Library and Information Studies' Winter 2020 course LIS 505: Introduction to Research in Library and Information Studies had the option of completing and critiquing the scale as part of a class assignment. The assignment, developed in partnership with Associate Professor Michael McNally, the faculty member teaching the course, required students to complete the scale using a think-aloud protocol (TAP) framework.<sup>2</sup> Through this content validity check, certain survey questions were removed to reduce redundancies. This process was also helpful in identifying jargon to be either replaced or better defined.

The version of the scale shared with these groups included questions that tested copyright knowledge. These questions were removed as they were deemed out of scope. In addition, the "I don't know" response option was added to the survey to address confusion experienced by multiple reviewers. The second draft CAS was then reviewed by nonexperts for general comprehensibility. This additional step was taken because of the scale's potential use in sectors outside of academia and academic libraries, which were the current domains of other reviewers up to this point and for copyright literacy research in general. The final draft of the scale, with 23 questions, is provided in appendix I; scale items 1–18 are provided below.

---

<sup>2</sup> TAP is designed to "probe an individual's understanding of a question, determine why the individual answered or did not answer in a certain manner, and so forth" (Peterson, 2018, p. 117). As noted by Barkaoui (2011), using the TAP framework can provide timely, specific information that reflects behavior.



Once a final draft had been agreed upon, research ethics approval was sought and received and an application for an internal research grant was submitted and awarded. Most of the grant money was used to fund an account with Qualtrics. Qualtrics is a corporation that offers a survey software service, has numerous academic research clients in both the United States and Canada, and was recommended by a survey expert consulted in early stages of the CAS development. The survey ran from September 27, 2019, to November 26, 2019, resulting in 521 responses. This sample size exceeds the suggested threshold of 400, which is described by MacCallum et al. (1999) as sufficient for conducting factor analyses in a range of scenarios. The resulting anonymized data was accessed via a web-based Qualtrics account and downloaded in csv format for additional statistical analysis, as per best practices established via the ethics approval process.

The 18 scale items related to copyright are presented here, with the full scale, including preamble and demographic items, included as appendix I.

1. I am familiar with copyright legislation and/or copyright case law.
2. I can identify exceptions to copyright infringement.
3. I frequently have concerns about copyright.
4. I get confused trying to navigate copyright issues.
5. I am comfortable performing actions that I think might be copyright infringement.
6. I am confident that the materials I create are protected by copyright.
7. I do not feel safe using copyright-protected materials that I do not hold the rights for.
8. I worry that I do not know enough about copyright.
9. I have access to good instructions and/or policies for using copyright-protected materials.
10. It is easy for me to get help or find information about copyright.
11. I feel hesitant to ask for help with copyright issues.
12. I worry about the consequences of copyright infringement.
13. I am confident that elected officials understand legal issues related to copyright.
14. I am worried about the amount of copyright infringement that goes on.
15. I often feel anxious in my day to day life.
16. I have had formal instruction related to copyright. Yes / No

17. Can you describe a time that concerns about copyright hampered or prevented you from doing something? Yes / No
  - a. Please describe the experience in one or two sentences.
18. I have avoided activities or projects because of copyright issues. Yes / No

## Results

The results of this research project are twofold: the development and evaluation of the scale itself and the consideration of responses to the survey.

### Evaluation of the Scale

The scale was evaluated for validity in two ways. First, feedback from experts, students, and laypeople was used to test and improve the scale for readability, relevance, and coherence. Second, a graduate student in statistics was hired as a statistical consultant to complete a series of analyses to evaluate the validity of the scale. This statistical evaluation included an exploratory factor analysis and employed Cronbach's alpha (Salkind, 2007) to test for scale reliability.

**Content Validity.** Content validity, which ensures that the scale represents what it aims to measure, was partially assessed prior to deployment, as described in the development section of this paper. This included both pilot testing (Netemeyer et al., 2003) as an established practice in content validity testing and consultation with experts, which Morgado et al. (2017) deem relevant as "expert judges have been the most widely utilized tool for analyzing content validity [and to] be the most common qualitative method for the elimination of unsuitable items."

**Internal Consistency and Reliability.** To measure the reliability, and more specifically the internal consistency of the CAS, Cronbach's alpha was calculated. Although this is not a statistical test, it can still be important in determining future uses of the scale because it "measures the internal consistency among a set of survey items that (a) a researcher believes all measure the same construct, (b) are therefore correlated with each other, and (c) thus could be formed into some type of scale" (Lavrakas, 2008). In this case, a high Cronbach's alpha of 0.83 suggests the CAS provides good internal consistency.

## Exploratory Factor Analysis

Construct validity, which “is most directly related to the question of what the instrument is in fact measuring” (Morgado et al., 2017), was assessed using exploratory factor analysis. This is standard practice in the construction and validation of scales (Allen, 2017) and allows for the exploration of “the underlying structure of correlations among observed variables” (Salkind, 2007). Put another way, this testing was completed to assist with determining if the CAS could reliably be applied in other scenarios.

In this case, a linear factor model using the first 15 scale items was examined in an attempt to reveal latent factors underlying respondents’ feelings on copyright anxiety. An appropriate number of factors for the model was selected by considering a scree plot, Kaiser’s rule (Salkind, 2007), and overall model interpretability. An orthogonal varimax rotation was applied when estimating factor loadings. In post-hoc analyses, separate models for scale items loading heavily on the previous model’s two factors, interpreted as “copyright knowledge” and “copyright chill,” were also considered. We present these results as an exploratory investigation of dimensions underlying copyright anxiety.

The survey data set obtained from Qualtrics consisted of 521 completed responses. The first 15 scale items allowed respondents to select “I don’t know.” These responses were treated as missing for purposes of statistical analysis and are summarized in table 1 of appendix II. Respondents with 10 or more “I don’t know” responses were removed from the factor analysis described below. Multiple imputation by chained equations was applied using classification and regression trees to impute missing data for the remaining analytic sample of 498 respondents. Marginal density plots showed satisfactory similarity between the distribution of observed and imputed responses for each survey item.

A scree plot suggested two as an appropriate number of factors while Kaiser’s rule (applied to the four largest eigenvalues of 4.28, 2.23, 1.02, and 0.86) suggested three. Since the third-largest eigenvalue was extremely close to one and the two-factor model was more interpretable than the three-factor model, the former was selected as the more parsimonious model. Regardless of the number of factors, survey items 14 and 15 had weak associations with the estimated factors, so both items were removed from consideration. Estimated factor loadings are presented in table 1. Cumulatively, the two-factor model for “knowledge” and “chill” explains 41.2% of the variability in survey responses.

Table 1. Factor Analysis of All CAS Items

Scale Item	Factor Loadings/Correlations	
	Factor 1: "Knowledge"	Factor 2: "Chill"
I am familiar with copyright legislation and/or copyright case law.	<b>0.763</b>	0.000
I can identify exceptions to copyright infringement.	<b>0.784</b>	0.052
I frequently have concerns about copyright.	<b>0.534</b>	<b>0.332</b>
I get confused trying to navigate copyright issues.	0.039	<b>0.621</b>
I am comfortable performing actions that I think might be copyright infringement.	<b>0.500</b>	<b>0.192</b>
I am confident that the materials I create are protected by copyright.	<b>0.642</b>	0.134
I do not feel safe using copyright-protected materials that I do not hold the rights for.	0.143	<b>0.422</b>
I worry that I do not know enough about copyright.	-0.061	<b>0.671</b>
I have access to good instructions and/or policies for using copyright-protected materials.	<b>0.734</b>	0.019
It is easy for me to get help or find information about copyright.	<b>0.684</b>	-0.002
I feel hesitant to ask for help with copyright issues.	0.083	<b>0.617</b>
I worry about the consequences of copyright infringement.	<b>0.206</b>	<b>0.563</b>

I am confident that elected officials understand legal issues related to copyright.	<b>0.491</b>	<b>0.175</b>
I am worried about the amount of copyright infringement that goes on.	(not included)	
I often feel anxious in my day to day life.	(not included)	

*Note:* Factor loadings can be interpreted as correlations between scale items and model factors. The color scale indicates larger, positive loadings with darker shades of green and those close to zero with white. Loadings with absolute value greater than 0.15 are bolded. All of the negative loadings are close to zero.

All scale items related to objective knowledge about copyright load positively and most strongly on the first factor. However, scale items pertaining to emotional reactions or to perceptions of copyright load positively and most strongly on the second factor: these include items beginning with “I get confused,” “I do not feel safe,” “I worry,” and “I feel hesitant.” Based on the aggregation of items in the factor 1 column with large loadings related to respondents’ existing knowledge or ability to acquire information about copyright, the researchers chose to interpret the first factor as “copyright knowledge.” Similarly, we chose to interpret the second factor as “copyright chill” due to the aggregation of items asking respondents to identify anxiety associated with copyright.

In a first post-hoc exploratory analysis, we focus on survey items with at least a moderate association with the copyright chill factor, namely items 3, 4, 7, 8, 11, and 12. A test for factor sufficiency suggests that a two-factor model is adequate ( $p = 0.056$ ). The estimated factor loadings for this model are presented in table 2 of appendix II. Cumulatively, the two-factor model explains 43.4% of the variability in survey responses for these scale items.

All scale items considered had a moderate, positive association with the first factor (with the exception of scale item 8: “I worry that I do not know enough about copyright,” which loaded only weakly). Conversely, weaker loadings are found on the second factor except for an extremely high loading from scale item 4. Interestingly, scale item 3 (“I frequently have concerns about copyright”) is uncorrelated with the second factor. Based on these results, the researchers found it appropriate to label the factors in this post-hoc analysis as “general copyright chill” and “copyright chill through lack of knowledge.”

In a second post-hoc exploratory analysis, we focus on survey items with at least a moderate association with the copyright knowledge factor, namely items 1, 2, 5, 6, 9, 10, and 13. A test for factor sufficiency suggests that a three-factor model is adequate ( $p = 0.145$ ). The estimated factor loadings for this model are presented in table 3, appendix 2. Cumulatively, the three-factor model explains 53.2% of the variability in survey responses for these scale items.

Scale items, with the exception of items 6 and 13 (“I am confident that the materials I create are protected by copyright” and “I am confident that elected officials understand legal issues related to copyright”), have loadings much higher on exactly one of the factors. Scale items 9 and 10, both related to access to information about copyright, associate most strongly with the first factor (and in the same direction). Similarly, scale items 1 and 2, both related to applications of copyright knowledge, load most heavily on the second factor. Scale item 5, related to comfort with one’s potential infringement of copyright, loads strongly on the third factor. Based on these observations, the researchers found it appropriate to refer to these three factors as “access to copyright knowledge,” “application of copyright knowledge,” and “comfort with infringing copyright.”

### **Descriptive Statistics**

One of the motivations for developing the Copyright Anxiety Scale was to determine whether copyright anxiety exists in the general population and, if so, to learn more about the nature of the phenomenon. This initial exploration of a broad range of individuals’ perceptions of copyright and how such perceptions might correlate with behavior is perhaps the most important contribution of this project for those working to provide and improve copyright literacy programming.<sup>3</sup>

All scale respondents were over the age of 18, with 42.8% between the ages of 18 and 34. Just over half (56.7%) of respondents had completed a college or university diploma or degree. A wide range of occupations were reported, with 11–15% of respondents reporting either health, sales/service, or business/finance/administration as the occupational area in which they had the most work experience.

Participants were drawn roughly equally from those living in the United States ( $n = 257$ ) and Canada ( $n = 264$ ). Gender identification breakdown was roughly 60:40, with more participants identifying as female ( $n = 317$ ) than male

---

<sup>3</sup> Frequency tabulations for all scale questions are available at <https://doi.org/10.7939/r3-y3tq-a337>.

(n = 198). Two participants identified as trans and three as nonbinary, and one participant selected the response category “other.”

At least three of the survey questions could be considered to convey a state of copyright anxiety. The number and percentage of respondents agreeing or strongly agreeing with these statements is provided in table 2.

Table 2. Respondents That Agree or Strongly Agree with Statements about Copyright Anxiety

	Number out of 521	Percentage
I get confused trying to navigate copyright issues.	180	34.6
I do not feel safe using copyright-protected materials that I do not hold the rights for.	265	50.9
I worry I do not know enough about copyright.	250	48.0

In addition, 194 (37.2%) of respondents said they had avoided or not completed activities or projects because of copyright issues and 146 (28.0%) said they could describe a time when concerns about copyright hampered or prevented them from doing something. Respondents who claimed that copyright hampered or prevented them were asked to describe a time when this happened. While 42 of the responses were not usable for further analysis (in most cases due to the brevity of the answer), 54 appeared to be related to personal uses, 26 seemed to occur in educational settings, and 24 described uses that could be considered commercial in nature. Thus, three-quarters of the respondents who reported a potential chill scenario experienced anxiety and chill when considering or attempting to use content for personal or educational use.<sup>4</sup>

Interestingly, eleven respondents who reported that copyright hampered or prevented their use referenced YouTube. Their comments appear to support the claim that YouTube’s Content ID system is discouraging legally defensible uses of copyright protected content.<sup>5</sup> Responses include the following:

<sup>4</sup> “The phrasing “potential chill” is used here given that the legal defensibility of the reported use cannot be determined from the survey data. In most cases copyright chill seemed likely.”

<sup>5</sup> For more information, see the Electronic Frontier Foundation’s December 2020 report, “Unfiltered: How YouTube’s ContentID Discourages Fair Use and Dictates What We See Online.” at <https://www.eff.org/files/2020/12/10/unfiltered.pdf>.



- “I was thinking of making a parody of a movie but given the YouTube copyright claim system didn’t feel safe making it.”
- “I would like to make YouTube videos but the idea of copyright scares me.”
- “A lot of my favorite YouTubers encounter copyright issues on a daily basis that seem ridiculous.”

### **Cross-Tabulations**

Cross-tabulations were completed in an attempt to better understand correlations among anxiety, knowledge, and the use of content perceived to be protected by copyright.

Responses to scale items focused on feelings of confusion and worry as well as confidence with identifying exceptions were further analyzed by running select cross-tabulations.<sup>6</sup> This helps identify both patterns of association and areas for further research.

A hesitancy to ask for help with copyright appears to be associated with both confusion about copyright *and* worrying about not knowing enough about copyright. Respondents who reported feeling hesitant to ask for help with copyright questions were more likely to feel confused about copyright (61.3%) than those who were not hesitant to ask for help (23.2%). Similarly, respondents who reported feeling hesitant to ask for help with copyright questions were more likely to report that they worry that they do not know enough about copyright (73.0%) than those who were not hesitant to ask for help (37.0%). It would seem that the people who might benefit the most from copyright support are less likely to ask for help.

In addition, the completion of formal instruction did not seem to correlate with being worried about not knowing enough about copyright. That is, of the respondents who claimed to have completed formal instruction, 47.2% reported being worried that they did not know enough about copyright; among respondents who claimed to not have completed formal instruction, 52.9% reported feeling worried that they did not know enough about copyright. Similarly, the percentage of respondents who expressed confusion trying to navigate copyright issues was almost the same regardless of whether they had completed formal copyright instruction. Of the respondents who reported the completion of formal instruction, 33.0% agreed or strongly agreed with the

---

<sup>6</sup> Ideas for cross-tabulations were solicited at conference presentations related to this project. The results of those cross-tabulations can be found at <https://doi.org/10.7939/r3-y3tq-a337>.



statement about confusion, compared to 35.0% for those who claimed to have not completed formal instruction. In addition, roughly half of respondents who reported having formal instruction said they had avoided or not completed activities because of copyright issues, compared with the population-wide figure of 37.2% and 30.0%, respectively, for those who reported no formal instruction. Identifying the nature of the instruction would be necessary before making any further observations about correlation and begs the need for further research, especially when the sample is drawn from the general public.

Similarly, running cross-tabulations related to respondents' confidence with the identification of exceptions to infringement helps clarify where more research might be useful. For example, 67.0% of respondents who claimed to be familiar with copyright legislation and case law agreed that they could identify exceptions to copyright infringement, and 50.9% were worried about the amount of copyright infringement that goes on. Understanding whether confidence is influenced by established knowledge or assumptions about copyright could help with planning copyright literacy programs. For example, asking additional questions designed to test the respondents' ability to identify statutory exceptions to infringement and potential infringement scenarios would help verify respondents' existing copyright knowledge and skill level, providing information that is useful when preparing suitable educational resources.

### **Testing for Statistically Significant Differences across Demographics**

Given the exploratory nature of this study, tests were conducted to determine whether there were any statistically significant differences in the distribution of responses based on gender identification or location. To accomplish this, chi-square tests of independence were used to examine the association between a survey item response (on a 5-point Likert scale together with an "I don't know" response) and either a location (United States/Canada) or a self-reported gender identification (male/female). In the analysis of associations with gender, respondents identifying as nonbinary, trans, or other were excluded due to the small number of respondents in these categories. For details, see tables 4 and 5 in appendix II.

The individual chi-square test assessing responses by gender suggested (at the 0.05 level) that gender was not associated with survey response for 10 of the 15 scale questions. The exceptions to this were Questions 3 ("I frequently have concerns about copyright"), 5 ("I am comfortable performing actions that I think might be copyright infringement"), 7 ("I do not feel safe using copyright-protected materials that I do not hold the rights for"), 10 ("It is easy for me to get

help or find information about copyright”), and 11 (“I feel hesitant to ask for help with copyright issues”). After correcting for multiple testing using a Holm adjustment, only the differences detected in Questions 7 and 11 remained significant.

Question 7 refers to feeling unsafe when using copyright-protected materials. Respondents who identified as female (38.5%) were more likely to select “agree” as a response category for this statement than those who identified as male (23.7%).

Question 11 refers to feeling hesitant to ask for help with copyright issues. Respondents who identified as male were more likely to feel hesitant to ask for help with copyright issues, with 13.1% selecting “strongly agree” as a response category compared with only 5.7% of respondents who identified as female. In addition, 12.0% of female-identifying respondents strongly disagreed with this statement, compared to 8.6% of those identifying as male. Interestingly, 8.2% of female-identifying respondents selected “I don’t know” as a response category compared with 3.0% of male-identifying respondents, and 27.4% of female-identifying respondents selected “neither agree nor disagree” compared to 34.8% of male-identifying respondents.

The individual chi-square test assessing responses by location suggested (at the 0.05 level) that location was not associated with survey response for 11 of the 15 scale questions. The exceptions to this were Questions 1 (“I am familiar with copyright legislation and/or copyright case law”), 2 (“I can identify exceptions to copyright infringement”), 4 (“I get confused trying to navigate copyright issues”), and 12 (“I worry about the consequences of copyright infringement”). None of these differences remained significant after correcting for multiple testing using a Holm adjustment.

## Discussion

Copyright anxiety not only exists in Canada and the United States but also influences decisions about working with copyright-protected content for creative output and expression. With roughly half of respondents not feeling safe using copyright-protected materials and also worrying that they do not know enough about copyright, it is hard to describe this public policy instrument as serving the public good with a high level of efficacy. Furthermore, the manifestation of copyright chill seems obvious when more than a third of a population expresses confusion about an area of law and avoids related activities. In particular, the effect of automated content scanning systems (e.g., YouTube’s Content ID) on

copyright anxiety and chill is likely an area that would benefit from additional research.

Identifying the nature of the instruction completed by respondents would be necessary before making any further observations about related correlation and begs the need for further research, especially when the sample is drawn from the general public. Additional research about factors that might influence the level of copyright confidence reported would also be beneficial. Obviously, results from both these areas of work could help with planning effective copyright literacy programs.

More research is also needed to better understand the relationship between copyright literacy programming and copyright anxiety. While this study did not seek to identify or assess copyright instruction itself, the weak relationship between the completion of (self-reported) copyright instruction and a reduction in anxiety does seem to reinforce the need for copyright literacy programming to (a) be informed by the needs of the community it is intended to serve and (b) be subject to assessment. This observation is further supported by this study's main factor analysis, which identifies copyright knowledge and copyright chill as separate, independent dimensions underlying the established phenomenon of copyright anxiety in the study population. In the future, it might be of interest to examine correlations between copyright knowledge and copyright chill scores in a similar population following an educational intervention.

A separate, post-hoc factor analysis of items associated with copyright chill suggests a component attributable to lack of knowledge, independent from a more general copyright chill effect. A similar analysis of items associated with copyright knowledge also suggested a more complex structure, with access, application, and comfort infringing copyright as independent dimensions of copyright knowledge. While these conclusions are interesting, both these follow-up analyses were unplanned and conducted on a small subset of questions. Future work can consider investigating these subdimensions of copyright knowledge and chill more rigorously.

The assessment of the CAS as a tool is informative but inconclusive. As mentioned in the section on internal consistency and reliability, the high Cronbach's alpha suggests a good internal consistency for the scale. However, the factor analysis explains less variation than the threshold of 55.0% commonly used as a rule-of-thumb in the social sciences.<sup>7</sup> While this work uncovered some

---

<sup>7</sup> Validity testing of this sort is not without criticism. For example, many scholars (including Kirk and Miller, 1986) recognize that it is impossible to create a perfect instrument of nonqualitative

interesting latent aspects of copyright anxiety (knowledge and chill), future versions of the scale might benefit from adapting the questions further to increase the amount of variation explained by the factor analysis. Of course, it is important to take all the methodology into account and not solely rely on the statistical evaluation to provide feedback on the scale. Statistical evaluations tend to be most effective for measuring systems where natural variability is understood. When it comes to copyright and anxiety there are a lot of nuances leading to complexities that “can behave very differently than the way simple physical systems behave. As a consequence, different repetitions of an action research study are unlikely to yield identical results except at high levels of abstraction, and not always then” (Coghlan & Brydon-Miller, 2014).

The low number of statistically significant variations when responses were analyzed by gender and location could raise some interesting questions. However, such questions are likely best posed and addressed by experts in gender and regional studies, respectively. While the authors cannot posit in an exploratory study why respondents identifying as women were more likely to report feeling unsafe using copyright-protected materials and less hesitant to ask for help with copyright issues, we suspect such results might be broadly associated with societal norms and expectations related to gender roles, social relations, and traditional power dynamics. Similarly, it is beyond the scope of this paper and our expertise to speculate about the lack of statistically significant variation in responses by location. As pointed out by Murray and Trosow (2013), it is generally assumed that Canadians know more about copyright law in the U.S. than Canadian copyright law and that “copyright litigation in the U.S. is more frequent and often more notorious” (2013, para. 11). While copyright practitioners and experts will note obvious differences between the two legal systems, it is difficult to know if these nuances are understood or recognized in the general population, especially since the general structure and approach of the law in this area is similar (e.g., statutory rights and exceptions to infringement, remediation through the courts, etc.). As with results related to cross-tabulations, additional questions intended to ascertain copyright knowledge and skill could help research better understand the underlying reasons for the lack of variation in response by location. In general, the authors encourage further commentary related to the results of the tests of statistical significance and are willing to work with others to continue this discussion.

---

data-making. Using a scale and conventional definitions of validity is to apply a positivist view to research, which suits traditional research methods (Coghlan and Brydon-Miller, 2014).

<https://doi.org/10.17161/jcel.v5i1.15212>

This project was inspired by the communities served by the authors, was informed by members of the library and copyright practitioners' community in Canada and the United States, and will hopefully be extended and expanded upon by members of these groups and others. Specifically, scholars, librarians, and government employees suggested that there would be value in creating the CAS revisions that would more closely serve the public library, academic, and government environments and/or be altered to reflect copyright regimes in different jurisdictions. This could lead to interesting comparisons between the results from the initial deployment of the CAS and these potential sector-specific results, which may lead to improvements of the scale. Furthermore, these specific sectors could use the scale to assess the level of copyright anxiety in their local context and make service, programming, and/or policy decisions to address feelings that might prevent legally defensible creative effort.

We would like to thank the library staff and copyright practitioners who contributed to the ongoing discussion at the following professional events:

- "I Would Avoid the Kinds of Activities or Projects That Might Involve Copyright Issues: Introducing the Copyright Anxiety Scale," ABC Copyright Conference. Online. June 11, 2020. <https://doi.org/10.7939/r3-gqsy-4833>
- "Copyright Anxiety and Chill: Is It Really a Problem?" NEOS Miniconference. Online. June 5, 2020. [https://era-av.library.ualberta.ca/media\\_objects/1v53jz05m](https://era-av.library.ualberta.ca/media_objects/1v53jz05m)
- "Does Copyright Anxiety Exist?" UIPO Annual Meeting. Online. May 28, 2020. May 28, 2020.
- "Introducing the Copyright Anxiety Scale." Poster presentation, OLA Superconference. Toronto, Ontario. January 31, 2020. <https://doi.org/10.7939/r3-69zc-gg58>

## Conclusion

It is clear from the survey response data that copyright anxiety is a real phenomenon for many and has practical consequences that can impede creativity and potentially legitimate forms of sharing content. Given that more than a quarter of respondents indicated that they had abandoned projects due to copyright-related anxiety, it is fair to say that the phenomenon is in fact prevalent.

This research found that a mixture of confusion, stress, and indecision based on questions surrounding copyright prevents users and creators of copyright-protected content from engaging in personal and educational activities



that are unlikely to infringe copyright law. The development of CAS provides a useful tool for the analysis of these precursory and potentially causative factors of copyright chill. Given the high degree of internal consistency within the scale, we believe that it can be a useful tool for future observations and research. Over time, further development of the CAS could help provide a more in-depth picture of changing attitudes and understandings of users' rights.

It is our hope that this scale can be used to help guide copyright literacy education efforts and thus enable more citizens to exercise their copyright-related rights.

## References

- Allen, M. (2017). *The sage encyclopedia of communication research methods* (Vols. 1–4). SAGE. <https://doi.org/10.4135/9781483381411>
- Aufderheide, P. (2020). The chilling effect of copyright permissions on academic research: The case of communication researchers. *Joint PIJIP/TLS Research Paper Series*, 49. <https://digitalcommons.wcl.american.edu/research/49>
- Barkaoui, K. (2011). Think-aloud protocols in research on essay rating: An Empirical study of their veridicality and reactivity. *Language Testing*, 28(1), 51–75. <https://doi.org/10.1177/0265532210376379>
- Benson, S. (2019). Fear and fair use: Addressing the affective domain. In S. Benson (Ed.), *Copyright conversations: Rights literacy in a digital world* (pp. 33–42). Association of College & Research Libraries. <http://hdl.handle.net/2142/105485>
- Breivik, P. S., & Gee, E. G. (1989). *Information literacy: Revolution in the library*. Macmillan.
- Bostick, S. (1992). *The development and validation of the Library Anxiety Scale* [Doctoral dissertation, Wayne State University]. ProQuest Dissertations & Theses Global. <https://login.ezproxy.library.ualberta.ca/login?url=https://www-proquest-com.login.ezproxy.library.ualberta.ca/dissertations-theses/development-validation-library-anxiety-scale/docview/304002616/se-2?accountid=14474>
- Corbetta, P. (2003). Scaling. In P. Corbetta (Ed.), *Social research: Theory, methods and techniques* (pp. 164–193). SAGE. <https://doi.org/10.4135/9781849209922>
- Coghlan, D., & Brydon-Miller, M. (2014). *The SAGE encyclopedia of action research* (Vols. 1–2). SAGE. <https://doi.org/10.4135/9781446294406>
- Cox, K. (November 15, 2005). *Censorship by Copyright: Report of the DOC Copyright Survey*. Program on Information Justice and Intellectual Property, Washington College of Law. <https://web.archive.org/web/20090404101302/http://www.wcl.american.edu/pijip/go/internationalfilm>
- Di Valentino, L. (2019). *Musician Copyright Survey Instrument* [Measurement instrument]. [https://drive.google.com/file/d/16rFAsZDcMc\\_3WjLCOOkmxc782WjFZGoD/view](https://drive.google.com/file/d/16rFAsZDcMc_3WjLCOOkmxc782WjFZGoD/view)

- Hobbs, R., Jaszi, P., & Aufderheide, P. (2007). *The cost of copyright confusion for media literacy*. Center for Social Media, American University.  
[https://cmsimpact.org/wp-content/uploads/2016/03/Final\\_CSM\\_copyright\\_report\\_0.pdf](https://cmsimpact.org/wp-content/uploads/2016/03/Final_CSM_copyright_report_0.pdf)
- International Communication Association (2010). *Clipping our own wings: Copyright and creativity in communication research*.  
[http://archive.cmsimpact.org/sites/default/files/documents/pages/ICA\\_-\\_Clipping.pdf](http://archive.cmsimpact.org/sites/default/files/documents/pages/ICA_-_Clipping.pdf)
- Jan, S. U., Anwar, A. A., & Warrich, N. F. (2016). Library anxiety and emotion perception among the undergraduate social sciences students: A relationship study. *Behavioral & Social Sciences Librarian*, 35(2), 52–63.  
<https://doi.org/10.1080/01639269.2016.1208556>
- Kirk, J., & Miller, M. L. (1986). *Qualitative research methods: Reliability and validity in qualitative research*. SAGE.  
<https://doi.org/10.4135/9781412985659>
- Lavrakas, P. J. (2008). *Encyclopedia of survey research methods* (Vols. 1–2). SAGE.  
<https://doi.org/10.4135/9781412963947>
- Lovibond, S. H., & Lovibond, P. F. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33(3), 335–343. [https://doi.org/10.1016/0005-7967\(94\)00075-U](https://doi.org/10.1016/0005-7967(94)00075-U)
- Lovibond, S. H., & Lovibond, P. F. (1996). *Manual for the Depression Anxiety Stress Scales*. Psychology Foundation of Australia.
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, 4(1), 84–99.  
<https://doi.org/10.1037/1082-989X.4.1.84>
- McAfee, E. L. (2018). Shame: The emotional basis of library anxiety. *College & Research Libraries*, 79(2), 237–256. <https://doi.org/10.5860/crl.79.2.237>
- Mellon, C. A. (1986). Library anxiety: a grounded theory and its development. *College & Research Libraries*, 47(2), 160–65. <http://pascal-francis.inist.fr/vibad/index.php?action=search&terms=8734610>
- Morgado, F. F. R., Meireles, J. F. F., Neves, C. M., Amaral, A. C. S., & Ferreira, M. E. C. (2017). Scale development: Ten main limitations and recommendations to improve future research practices. *Psicologia: Reflexão e Crítica*, 30(0).  
<https://doi.org/10.1186/s41155-016-0057-1>



- Morrison, C. & Secker, J. (2017). Understanding librarians' experiences of copyright. *Library Management*, 38(6/7), 354–368.  
<https://doi.org/10.1108/LM-01-2017-0011>
- Murray, L. J., & Trosow, S. E. (2013). *Canadian copyright: A citizen's guide* (2nd ed.). Between the Lines.
- Netemeyer, R. G., Bearden, W. O., & Sharma, S. (2003). Step 3: Designing and conducting studies to develop a scale. In R. G. Netemeyer, W. O. Bearden, & S. Sharma (Eds.), *Scaling procedures* (pp. 116–142). SAGE.  
<https://doi.org/10.4135/9781412985772>
- Nilsson, I. (2016). Developing new copyright services in academic libraries. *Insights: The UKSG Journal*, 29(1), 7–83. <https://doi.org/10.1629/uksg.276>
- Onwuegbuzie, A. J., Jiao, Q. G., & Bostick, S. L. (2004). *Library anxiety: Theory, research, and applications*. Scarecrow Press.
- Parkitny, L., & McAuley, J. (2010). The Depression Anxiety Stress Scale (DASS). *Journal of Physiotherapy*, 56(3), 204. [https://doi.org/10.1016/S1836-9553\(10\)70030-8](https://doi.org/10.1016/S1836-9553(10)70030-8)
- Peterson, R. (2018). *Constructing effective questionnaires*. SAGE.  
<https://doi.org/10.4135/9781483349022>
- Salkind, N. J. (2007). *Encyclopedia of measurement and statistics* (Vols. 1–3). SAGE. <https://doi.org/10.4135/9781412952644>
- Silbey, J. (2016). Fairer uses. *Boston University Law Review*, 96(3), 857–868.  
[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2796735](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2796735)
- Szabó, M. (2009). The short version of the Depression Anxiety Stress Scales (DASS-21): Factor structure in a young adolescent sample. *Journal of Adolescence*, 33(1), 1–8.  
<https://doi.org/10.1016/j.adolescence.2009.05.014>
- Wurman, R. S. (1989). *Information anxiety*. Doubleday.

### Bibliography

- Ericsson, K. A., & Simon, H. A. (1998). How to study thinking in everyday life: Contrasting Think-aloud protocols with descriptions and explanations of thinking. *Mind, Culture & Activity*, 5(3), 178–186.  
[https://doi.org/10.1207/s15327884mca0503\\_3](https://doi.org/10.1207/s15327884mca0503_3)
- Ormerod, T. C., & Ball, L. J. (2017). Cognitive psychology. In C. Willig (Ed.), *The SAGE handbook of qualitative research in psychology* (pp. 572–589) SAGE.  
<http://dx.doi.org/10.4135/9781526405555>



- Willis, G. (2016). Questionnaire pretesting. In C. Wolf, D. Joye, T. W. Smith, & Y. Fu, (Eds.), *The SAGE handbook of survey methodology* (pp. 359–381). SAGE.  
<http://dx.doi.org/10.4135/9781473957893>
- Xu, Y. (2018). Measuring L2 essay rating strategy: Scale development and preliminary validation. *Frontiers in Education, 3*.  
<https://doi.org/10.3389/feduc.2018.00027>

## Appendix I: Final Draft Copyright Anxiety Scale

### Copyright Anxiety Scale

Prepared by Amanda Wakaruk and Céline Gareau-Brennan

September 6, 2019

By completing this survey, you are consenting to participate in an exploratory study related to copyright anxiety. At any time during the study you can withdraw by simply exiting your browser. If you do not finish the study, you will not be compensated. All data collected will be anonymized by Qualtrics before being given to the researchers. Your personal information will not be provided to the researchers.

This survey does not present you with any known risks or benefits beyond any compensation you might receive from Qualtrics and should take less than 15 minutes to complete.

The plan for this study has been reviewed by a Research Ethics Board at the University of Alberta. If you have questions about your rights or how research should be conducted, you can call (780) 492-2615 (reference Pro00092768).

This office is independent of the researchers. The researchers are Amanda Wakaruk and Céline Gareau-Brennan; they can be reached at [amanda.wakaruk@ualberta.ca](mailto:amanda.wakaruk@ualberta.ca).

Copyright law provides rights holders with control over the reproduction and re-use of literary, dramatic, musical, and artistic works (e.g., books, songs, paintings, memes, blog posts, etc.). For example, if you write an essay or poem then only you can make copies of and share that work (both commercially and non-commercially and via the media you choose).

In some cases, copyright law also provides users of copyright-protected works with limited rights for re-using these works (e.g., copying excerpts of a work for private study or research purposes). For example, if someone includes a line from your essay or poem in a meme and shares it on their personal social media account, this is likely to be allowable under a copyright exception.

Other uses of copyright-protected works without permission from the rights holder may be an infringement of copyright. For example, the commercial publication of your essay without your permission may be copyright infringement.

Please indicate your agreement or disagreement with the following statements for questions 1–16.

0 = I don't know

1 = Strongly Disagree

2 = Disagree

3 = Neither Agree nor Disagree

4 = Agree

5 = Strongly Agree

1. I am familiar with copyright legislation and/or copyright case law.
2. I can identify exceptions to copyright infringement.
3. I frequently have concerns about copyright.
4. I get confused trying to navigate copyright issues.
5. I am comfortable performing actions that I think might be copyright infringement.
6. I am confident that the materials I create are protected by copyright.
7. I do not feel safe using copyright-protected materials that I do not hold the rights for.
8. I worry that I do not know enough about copyright.
9. I have access to good instructions and/or policies for using copyright-protected materials.
10. It is easy for me to get help or find information about copyright.
11. I feel hesitant to ask for help with copyright issues.
12. I worry about the consequences of copyright infringement.
13. I am confident that elected officials understand legal issues related to copyright.
14. I am worried about the amount of copyright infringement that goes on.
15. I often feel anxious in my day to day life.
16. I have had formal instruction related to copyright. Yes / No
17. Can you describe a time that concerns about copyright hampered or prevented you from doing something? Yes / No
  - a. Please describe the experience in one or two sentences.
18. I have avoided activities or projects because of copyright issues. Yes / No
19. Any additional comments you would like to share?
20. Age: 18–24; 25–34; 35–44; 45–54; 55–64; 65 years and over
21. Education, highest certificate, diploma, or degree completed:
  - No certificate, diploma, or degree

- Secondary (high) school diploma or equivalency certificate
- Apprenticeship or trades certificate, diploma, or degree
- College, CEGEP, or other non-university certificate, diploma, or degree
- Undergraduate university or college degree
- Graduate level university or college degree

22. Current occupation/occupational area with most experience (can select up to two)

- a. business, finance, administration
- b. sales, service
- c. natural and applied sciences
- d. health
- e. education
- f. law
- g. social, community, and government services
- h. art, culture
- i. recreation, sport
- j. trades, transport, and equipment operators
- k. natural resources, agriculture
- l. manufacturing
- m. utilities
- n. never employed
- o. other: \_\_\_\_\_

23. Gender identification

- a. male
- b. female
- c. non-binary
- d. trans
- e. other: \_\_\_\_\_

### Appendix II: Tables Related to Statistical Analysis

**Table 1. Distribution of the Number of “I Don’t Know” Responses**

# “I don’t know”	0	1	2	3	4	5	6	7	8	9	10	11	13	14	15
# of individuals	410	39	17	8	7	6	2	4	2	3	3	2	3	4	11

**Table 2. Factor Analysis of the CAS Items Associated with Copyright Chill**

Scale Item	Factor Loadings/Correlations	
	Factor 1: “General Copyright Chill”	Factor 2: “Copyright Chill Through Lack of Knowledge”
I am familiar with copyright legislation and/or copyright case law.	(not included)	
I can identify exceptions to copyright infringement.	(not included)	
I frequently have concerns about copyright.	<b>0.519</b>	0.023
I get confused trying to navigate copyright issues.	<b>0.440</b>	<b>0.378</b>

I am comfortable performing actions that I think might be copyright infringement.	(not included)	
I am confident that the materials I create are protected by copyright.	(not included)	
I do not feel safe using copyright-protected materials that I do not hold the rights for.	<b>0.416</b>	<b>0.215</b>
I worry that I do not know enough about copyright.	<b>0.203</b>	<b>0.977</b>
I have access to good instructions and/or policies for using copyright-protected materials.	(not included)	
It is easy for me to get help or find information about copyright.	(not included)	
I feel hesitant to ask for help with copyright issues.	<b>0.524</b>	<b>0.278</b>
I worry about the consequences of copyright infringement.	<b>0.577</b>	<b>0.269</b>
I am confident that elected officials understand legal issues related to copyright.	(not included)	

I am worried about the amount of copyright infringement that goes on.	(not included)
I often feel anxious in my day to day life.	(not included)

*Note.* Factor loadings can be interpreted as correlations between scale items and model factors. The color scale indicates larger positive and negative loadings (in darker red and green, respectively) and those close to zero (in white). Loadings with absolute value greater than 0.15 are bolded. None of the estimated loadings are negative.

**Table 3.**  
*Factor Analysis of the CAS Items Associated with Copyright Knowledge*

Scale Item	Factor Loadings/Correlations		
	Factor 1: “Access to Copyright Knowledge”	Factor 2: “Application of Copyright Knowledge”	Factor 3: “Comfortability with Infringing Copyright”
I am familiar with copyright legislation and/or copyright case law.	<b>0.307</b>	<b>0.804</b>	<b>0.185</b>
I can identify exceptions to copyright infringement.	<b>0.331</b>	<b>0.675</b>	<b>0.304</b>



I frequently have concerns about copyright.	(not included)		
I get confused trying to navigate copyright issues.	(not included)		
I am comfortable performing actions that I think might be copyright infringement.	<b>0.184</b>	<b>0.209</b>	<b>0.735</b>
I am confident that the materials I create are protected by copyright.	<b>0.399</b>	<b>0.360</b>	<b>0.345</b>
I do not feel safe using copyright-protected materials that I do not hold the rights for.	(not included)		
I worry that I do not know enough about copyright.	(not included)		
I have access to good instructions and/or policies for using copyright-protected materials.	<b>0.848</b>	<b>0.211</b>	<b>0.248</b>
It is easy for me to get help or find information about copyright.	<b>0.681</b>	<b>0.334</b>	0.100
I feel hesitant to ask for help with copyright issues.	(not included)		

I worry about the consequences of copyright infringement.	(not included)		
I am confident that elected officials understand legal issues related to copyright.	<b>0.429</b>	<b>0.243</b>	<b>0.172</b>
I am worried about the amount of copyright infringement that goes on.	(not included)		
I often feel anxious in my day to day life.	(not included)		

*Note.* Factor loadings can be interpreted as correlations between scale items and model factors. The color scale indicates larger, positive loadings in darker green (using 0.2, 0.4, 0.6, and 0.8 as thresholds) and zero loadings in white. Loadings with absolute value greater than 0.15 are bolded. None of the estimated loadings are negative.

**Table 4. Comparisons of Item Response Distributions by Identified Gender**

Scale Item	Chi-square Test p-value	Adjusted p-value	Response Percentages by Identified Gender
I am familiar with copyright legislation and/or copyright case law.	0.4879	1	

I can identify exceptions to copyright infringement.	0.1644	1																						
I frequently have concerns about copyright.	0.0543	0.5962																						
I get confused trying to navigate copyright issues.	0.4233	1																						
I am comfortable performing actions that I think might be copyright infringement.	0.0076	0.0988	<table border="1"> <thead> <tr> <th></th> <th>SD</th> <th>D</th> <th>N</th> <th>A</th> <th>SA</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>Female</td> <td>19.9</td> <td>26.2</td> <td>23.7</td> <td>15.8</td> <td>6.3</td> <td>8.2</td> </tr> <tr> <td>Male</td> <td>12.6</td> <td>21.2</td> <td>28.3</td> <td>19.2</td> <td>13.6</td> <td>5.1</td> </tr> </tbody> </table>		SD	D	N	A	SA	DK	Female	19.9	26.2	23.7	15.8	6.3	8.2	Male	12.6	21.2	28.3	19.2	13.6	5.1
	SD	D	N	A	SA	DK																		
Female	19.9	26.2	23.7	15.8	6.3	8.2																		
Male	12.6	21.2	28.3	19.2	13.6	5.1																		
I am confident that the materials I create are protected by copyright.	0.2764	1																						
I do not feel safe using copyright-protected materials that I do not hold the rights for.	0.0031	0.0465	<table border="1"> <thead> <tr> <th></th> <th>SD</th> <th>D</th> <th>N</th> <th>A</th> <th>SA</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>Female</td> <td>6.3</td> <td>7.3</td> <td>22.1</td> <td>38.5</td> <td>16.4</td> <td>9.5</td> </tr> <tr> <td>Male</td> <td>5.6</td> <td>11.1</td> <td>32.8</td> <td>23.7</td> <td>20.2</td> <td>6.6</td> </tr> </tbody> </table>		SD	D	N	A	SA	DK	Female	6.3	7.3	22.1	38.5	16.4	9.5	Male	5.6	11.1	32.8	23.7	20.2	6.6
	SD	D	N	A	SA	DK																		
Female	6.3	7.3	22.1	38.5	16.4	9.5																		
Male	5.6	11.1	32.8	23.7	20.2	6.6																		

I worry that I do not know enough about copyright.	0.0706	0.7060																						
I have access to good instructions and/or policies for using copyright-protected materials.	0.1286	1																						
It is easy for me to get help or find information about copyright.	0.0135	0.1620	<table border="1"> <thead> <tr> <th></th> <th>SD</th> <th>D</th> <th>N</th> <th>A</th> <th>SA</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>Female</td> <td>4.7</td> <td>16.7</td> <td>24.9</td> <td>32.2</td> <td>12.3</td> <td>9.1</td> </tr> <tr> <td>Male</td> <td>5.6</td> <td>11.6</td> <td>30.3</td> <td>27.8</td> <td>20.7</td> <td>4.0</td> </tr> </tbody> </table>		SD	D	N	A	SA	DK	Female	4.7	16.7	24.9	32.2	12.3	9.1	Male	5.6	11.6	30.3	27.8	20.7	4.0
	SD	D	N	A	SA	DK																		
Female	4.7	16.7	24.9	32.2	12.3	9.1																		
Male	5.6	11.6	30.3	27.8	20.7	4.0																		
I feel hesitant to ask for help with copyright issues.	0.0032	0.0465	<table border="1"> <thead> <tr> <th></th> <th>SD</th> <th>D</th> <th>N</th> <th>A</th> <th>SA</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>Female</td> <td>12.0</td> <td>25.9</td> <td>27.4</td> <td>20.8</td> <td>5.7</td> <td>8.2</td> </tr> <tr> <td>Male</td> <td>8.6</td> <td>21.7</td> <td>34.8</td> <td>18.7</td> <td>13.1</td> <td>3.0</td> </tr> </tbody> </table>		SD	D	N	A	SA	DK	Female	12.0	25.9	27.4	20.8	5.7	8.2	Male	8.6	21.7	34.8	18.7	13.1	3.0
	SD	D	N	A	SA	DK																		
Female	12.0	25.9	27.4	20.8	5.7	8.2																		
Male	8.6	21.7	34.8	18.7	13.1	3.0																		
I worry about the consequences of copyright infringement.	0.1466	1																						

I am confident that elected officials understand legal issues related to copyright.	0.2693	1	
I am worried about the amount of copyright infringement that goes on.	0.2887	1	
I often feel anxious in my day to day life.	0.5324	1	

*Note:* Adjusted p-values are obtained by applying a Holm-Bonferroni correction to the chi-square test p-values. The distribution of responses (among 317 and 198 respondents identifying as female and male, respectively) is only reported for items where the unadjusted p-value is < 0.05. Responses are coded as SD (strongly disagree), D (disagree), N (neither agree nor disagree), A (agree), SA (strongly agree), and DK (I don't know).

**Table 5. Comparisons of Item Response Distributions by Location**

Scale Item	Chi-square Test p-value	Adjusted p-value	Response Percentages by Country						
I am familiar with copyright legislation and/or copyright case law.	0.0194	0.2522		SD	D	N	A	SA	DK
			Canada	7.6	15.9	21.2	37.1	10.6	7.6



			USA	11.7	12.1	16.0	33.5	19.8	7.0
I can identify exceptions to copyright infringement.	0.0078	0.1170	Canada	SD	D	N	A	SA	DK
			USA	7.6	21.2	25.8	29.2	6.4	9.8
				8.6	13.2	24.5	32.3	14.8	6.6
I frequently have concerns about copyright.	0.0612	0.6120							
I get confused trying to navigate copyright issues.	0.0178	0.2492	Canada	SD	D	N	A	SA	DK
			USA	7.6	17.8	27.3	31.4	6.8	9.1
				9.7	22.6	32.3	21.0	9.7	4.7
I am comfortable performing actions that I think might be copyright infringement.	0.3654	0.9576							
I am confident that the materials I create are protected by copyright.	0.0550	0.6050							

I do not feel safe using copyright-protected materials that I do not hold the rights for.	0.2758	0.9576																						
I worry that I do not know enough about copyright.	0.0820	0.6120																						
I have access to good instructions and/or policies for using copyright-protected materials.	0.1554	0.9324																						
It is easy for me to get help or find information about copyright.	0.0726	0.6120																						
I feel hesitant to ask for help with copyright issues.	0.1626	0.9324																						
I worry about the consequences of copyright infringement.	0.0268	0.3216	<table border="1"> <thead> <tr> <th></th> <th>SD</th> <th>D</th> <th>N</th> <th>A</th> <th>SA</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>Canada</td> <td>7.2</td> <td>14.8</td> <td>20.5</td> <td>35.6</td> <td>13.3</td> <td>8.7</td> </tr> <tr> <td>USA</td> <td>7.0</td> <td>18.7</td> <td>28.4</td> <td>24.9</td> <td>16.0</td> <td>5.1</td> </tr> </tbody> </table>		SD	D	N	A	SA	DK	Canada	7.2	14.8	20.5	35.6	13.3	8.7	USA	7.0	18.7	28.4	24.9	16.0	5.1
	SD	D	N	A	SA	DK																		
Canada	7.2	14.8	20.5	35.6	13.3	8.7																		
USA	7.0	18.7	28.4	24.9	16.0	5.1																		

I am confident that elected officials understand legal issues related to copyright.	0.0639	0.6120	
I am worried about the amount of copyright infringement that goes on.	0.2394	0.9576	
I often feel anxious in my day to day life.	0.5629	0.9576	

*Note:* Adjusted p-values are obtained by applying a Holm-Bonferroni correction to the chi-square test p-values. The distribution of responses (among 264 and 257 respondents from Canada and the United States, respectively) is only reported for items where the unadjusted p-value is < 0.05. Responses are coded as SD (strongly disagree), D (disagree), N (neither agree nor disagree), A (agree), SA (strongly agree), and DK (I don't know).