Revue YOUR Review

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York Online Undergraduate Research

La *Revue* **YOUR** *Review* se propose de mettre en valeur la recherche des étudiants de premier cycle et offre aux étudiants de l'Université York (Toronto, Canada) l'occasion de rédiger un article pour la publication. Cette revue annuelle à comité de lecture et à libre accès est pluridisciplinaire et bilingue (anglais/français).

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Asha Cabaca. (2021). *Les pommes sauvages (Le fruit du travail)* [Sculpture en bronze. Dimensions à peu près 2,5p x 3p x 2,5p chaque pomme (15 pommes en tout). Créée de quinze pommes sauvages, en utilisant la méthode de coulage en sable]

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Traduire « Misster E » en français : Problèmes de langage non binaire dans une langue grammaticalement genrée

Éditorial

La couverture du tome 8 de la *Revue YOUR Review* (2021) présente le portrait de Misster E, l'alter ego non binaire—« un drag-king enchanteur qui brouille des genres » (Bonczek, 2021b)—de l'artiste, Natalia Bonczek. Comme indiqué dans la déclaration de l'artiste publiée dans la version anglaise du numéro :[1]

> Misster E is encouraging us to write our own stories about gender and who we are. Through this alter ego, I present a more confident self, unharmed by the harsh binaries of expectations of « normal woman » or « normal man ». This painting may be uncomfortable because it challenges these norms, but I also hope to create space for alternative interpretations of gender and the performance of it. (Bonczek, 2021a)[2]

La déclaration accompagnant le tableau présenté dans le tome 8 a été rédigée en anglais, et la rédaction de la *RYR* a été chargée de la traduction française. La simple phrase anglaise, « Through this alter ego, I present a more confident self, unharmed by the harsh binaries of expectations of "normal woman" or "normal man" »,

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[1] Dans certains cas, il faudra citer l'original anglais de la déclaration de l'artiste (Bonczek, 2021a), dans la mesure où le présent texte porte sur la traduction en français de certaines constructions non-genrées en anglais. On reproduira la traduction française publiée dans la version française du numéro (Bonczek, 2021b) dans le texte ou dans les notes de bas de page. On fournira également des traductions des communications en anglais.

[2] Traduction : « Misster E nous encourage à écrire nos propres histoires au sujet du genre et qui nous sommes. À travers cet alter ego, je présente une image d'um moi plus confianx, épargnæ des binarités dures des attentes d'être "une femme normale" ou "un homme normal". Regarder ce tableau peut être gênant parce qu'il met ces normes en défit, mais j'espère aussi pouvoir créer de l'espace pour des interprétations alternatives de "genre" aussi bien que de sa performance » (Bonczek, 2021b).

développe soigneusement un concept de « self » qui a été laissé dépourvu de genre, mais qui nécessitait un investissement supplémentaire dans l'expression non binaire en français. Qui présente « a more confident self » ? Est-ce l'artiste, ou est-ce son alter ego ? S'il s'agit de l'alter ego, pourrait-on supposer que, puisqu'il s'agit d'un drag-king, il s'agit alors d'identité masculine ? La déclaration décrit l'alter ego comme « gender-bending » (Bonczek, 2021a), c'est-à-dire « qui brouille des genres » (Bonczek, 2021b) ; son nom est écrit comme un composé de « Miss », « Mister » et « Mystery » ; et l'objectif exprimé de la peinture, et de l'existence même de Misster E, est de contester les normes établies par les « binarités dures » et de « créer de l'espace pour des interprétations alternatives du "genre" aussi bien que de sa performance » (Bonczek, 2021b). Les substantifs en français portent traditionnellement des marques du genre grammatical, qui, lorsqu'il ne s'agit pas de sexe biologique, leur est attribué de façon tout à fait arbitraire ; lorsqu'il s'agit d'êtres humains en particulier, on s'attend généralement à ce que le genre grammatical du mot corresponde à l'identité de genre de cette personne. Et les options conventionnelles disponibles en français exigeraient de définir Misster E à travers les « binarités dures » de la grammaire masculine–féminine. Alors, quel genre est-ce que l'artiste interprète ? Quel genre grammatical sera assigné à un personnage non binaire ? Est-ce « un moi » ou « une moi » ? Est-ce que l'artiste est « confiant » et « épargné » ou « confiante » et « épargnée » ? Évidemment, les options binaires rendues disponibles par l'emploi conventionnel de la langue française déçoivent l'artiste, déçoivent le drag-king qui « brouille des genres », déçoivent la traduction et déçoivent le public lecteur. Un choix éditorial s'est imposé. Une position idéologique a dû être prise.

La rédaction estime capital de consulter l'artiste pour ce qui concerne la traduction française des éléments de la version originale anglaise dans les cas où le recours au langage genré s'avèrerait inévitable. Ainsi, notre discussion souligne quelques éléments de certaines préoccupations de la rédaction et des préférences de l'artiste. La rédaction présente une traduction préliminaire mais reste dubitative quant à sa fidélité absolue au message que l'artiste veut faire passer. Rien n'indique, hors contexte, que la traduction française diffère de la version originale anglaise. Cependant, la version anglaise garde des zones d'ombre de par la nature même de la langue anglaise. De fait, la traduction française a introduit des éléments genrés étrangers à la version anglaise. Il était donc impératif que la rédaction parvînt à les identifier le plus précisément possible. Par exemple, on avait proposé, pour la phrase « Through this alter ego, I present a more confident self, unharmed by the harsh binaries of expectations of "normal woman" or "normal man" », la traduction suivante : « À travers cet alter ego, je présente une image d'une moi plus confiante, épargnée des binarités dures des attentes d'être "une femme normale" ou "un homme normal" », mais la rédaction a interpellé l'artiste sur certaines de ses préoccupations:

> So you are presenting a more confident « self », through your alter ego. We have translated « self » as « moi » (which would literally be like saying « a more confident me »), but the « moi » in this translation is feminine (« une moi »). This is the tricky part of French—it has grammatical gender that is essentially binary. There are some generally unconventional mechanisms that some people use to get around binary grammatical gender, but they are not all widely accepted. Are you comfortable with the « moi » being a « feminine » one, « une (which is feminine, as opposed to the masculine "un") moi »? The confidence is expressed through the alter ego, according to your statement, so the expression « une moi » is something that we wanted to check with you about. Essentially, is the « self » that you are talking about a self that you wish to use the feminine article « une » with? This would also affect the form of « confiante » 'confident' and « épargnée » 'unharmed', which are currently in their feminine forms. (K. Reynolds, communication personnelle, 21 juillet 2021)[3]

La réponse de l'artiste a été qu'il était important d'essayer d'employer un langage qui n'enferme pas l'artiste ou son alter ego dans une binarité quelconque—c'est justement ce que le tableau et la déclaration visent à exprimer ! La rédaction et l'artiste ont fait des recherches pour découvrir quel mécanisme répondrait le mieux aux besoins de la déclaration française. L'artiste a demandé un conseil à une connaissance drag à Montréal, qui a noté que souvent l'approche du type « ami.e » ou « étudiant.e » y est employée ; mais personne parmi nous n'a estimé que c'était une solution satisfaisante, étant donnée sa dépendance à la binarité des genres grammaticaux masculin–féminin. En outre, il existe d'autres approches qui répondent mieux aux besoins de la communauté non binaire. La rédaction a proposé « um moi » au lieu de « une moi » ; « confianx » à la place de « confiante » ; et « épargnæ » pour remplacer « épargnée ». Consciente qu'une partie du public lecteur pourrait rencontrer pour la première fois un langage non binaire, la rédaction a suggéré « confianx » et « épargnæ » parmi d'autres options couramment utilisées, car elle estimait qu'elles étaient les plus explicites. Ces formes étaient les moins susceptibles d'être interprétées par les non initiæs comme des

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[3] Traduction: Tu présentes donc un « self » plus confiant, à travers ton alter ego. Nous avons traduit « self » par « moi », mais le mot « moi » dans cette traduction est féminin (« une moi »). C'est la partie délicate du français—il y a des genres grammaticaux qui sont essentiellement binaires. Il existe des mécanismes généralement non conventionnels que certaines personnes utilisent pour contourner le genre grammatical binaire, mais ils ne sont pas tous largement acceptés. Es-tu à l'aise avec le mot « moi » étant « féminin », « une moi » ? La confiance s'exprime à travers l'alter ego, selon ta déclaration, donc l'expression « une moi » est quelque chose que nous voulions vérifier avec toi. Essentiellement, est-ce que le concept de « self » dont tu parles peut être exprimé avec l'article féminin « une » ? Cela affecterait également la forme de « confiante » et « épargnée », qui sont actuellement dans leurs formes féminines.

« erreurs » en utilisant des formules orthographiques qui ne sont pas traditionnellement employées en français et elles étaient les expressions de non binarité les plus fièrement affirmées : « x », qui a gagné en popularité dans d'autres langues, notamment en espagnol et dans la communauté latinx, et « æ », qui se présente comme son propre porteur de données, car même s'il est interprété comme la fusion de deux graphèmes indépendants <a> et <e>, ces graphèmes ne sont généralement pas utilisés en opposition binaire en français (par opposition à <o> et <a> en espagnol, par exemple). En comparaison avec la solution « ami.e » désormais un peu plus traditionnelle, toujours ancrée dans la binarité, l'artiste a confirmé son approbation du langage proposé, le jugeant comme « the more accessible option » car « it seems to read better and we are making a clear statement »[4] (N. Bonczek, communication personnelle, 25 juillet 2021).

Un autre sujet d'intérêt concernait le mot français « drag-king », manifestement un calque du mot anglais. « King » est l'un de ces mots en anglais qui sont genrés, comme « girl », « brother », « son » et « aunt », qui diffèrent de mots comme « waiter » et « waitress » dont le genre ne se distingue que par leurs suffixes « -er » et « -ress ». Mais le personnage de drag de l'artiste est, comme indiqué, « gender-bending » et non binaire. La rédaction a consulté le *Lexique de la diversité sexuelle et de genre* du Gouvernement du Canada, dans lequel « drag-king » est clairement marqué comme grammaticalement masculin en français, et « drag-queen » marqué comme grammaticalement féminin. La rédaction a communiqué à l'artiste, « The rationale that they use is that people who do drag may or may not have a nonbinary identity, but the "drag king" themself is a masculine persona and the "drag queen" a feminine one, regardless of the gender identity of the performer »,[5] se demandant cependant si cette source avait de la force dans ce contexte particulier : « Is this something you agree with, or do you want to have a more radical take on this? »[6] (K. Reynolds, communication personnelle, 24 juillet 2021). L'artiste décrit son personnage de drag non binaire comme « a gender-bending, glamourous drag king », finalement traduit par « un drag-king enchanteur qui brouille des genres » (Bonczek, 2021b). Initialement déstabilisée par ce choix, la rédaction demande, « How could "Misster E" who is "gender-bending" be "un drag-king enchanteur"? »,[7] proposant en réponse, « the nonbinary "<u>um</u> drag-king <u>enchantaire</u>" » et notant, « a more

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[4] Traduction : … l'option la plus accessible [car] il semble plus facile à lire et […] fait une déclaration claire.

[5] Traduction : Le raisonnement qu'ils emploient est que les personnes qui font du drag peuvent ou non avoir une identité non binaire, mais le « drag-king » lui-même est un personnage masculin et la « drag-queen » un personnage féminin, quelle que soit l'identité de genre de l'interprète.

[6] Traduction : Est-ce quelque chose avec lequel tu es d'accord, ou veux-tu avoir une vision plus radicale de cela ?

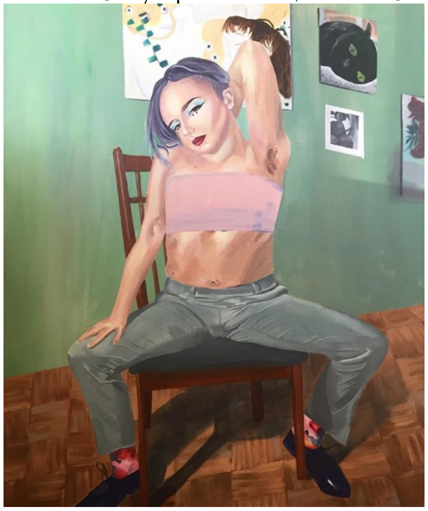
[7] Traduction : Comment est-ce que « Misster E » qui est « gender-bending » pourrait être « un drag-king enchanteur » ?

common way to do "enchantaire" would be "enchateureuse", which is a combination of "enchanteur" and "enchanteuse", but this is objectionable for the same reason that "ami.e" is objectionable insofar as it is just a combination of masculine and feminine »[8] (K. Reynolds, communication personnelle, 24 juillet 2021). Dans le même échange, la rédaction a également exposé un point de vue opposé :

> But some would argue that *drag-king* is like *personne*—it has a grammatical gender that is what it is, regardless of the identifying gender of the person. Others would say that by virtue of your using the word « drag-king » and not something else, you are necessarily accepting the masculine grammatical gender assignment. (K. Reynolds, communication personnelle, 24 juillet, 2021)[9]

La réponse de l'artiste, tout sans approcher l'achèvement du projet, a été profonde et personnelle :

Figure 1. Natalia Bonczek. (2019). *Misster E* [acrylique sur toile, 23″x36″]



> Yes, a nonbinary « King » may be gendered but I have been to some drag performances by nonbinary individuals who present as nonbinary kings and queens. I'm sure there will be a time when there will be a name for a fully nonbinary performance, but Misster E is a King who is nonbinary, glamorous, gender-bending as a commentary of how we may understand masculinity and how one may take this on. Misster E is taking on the masculine role of King but in a Queer, and disruptive form. The King persona is very important for the statement as this project was to point to how femme Queens have been more « accepted » or perhaps shown as a spectacle in mainstream culture, but alternative understandings of masculinity have not been widely celebrated or even considered. There is and has been a similar issue with butch women

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[8] Traduction : Une façon plus courante de faire « enchantaire » serait « enchateureuse », qui est une combinaison de « enchanteur » et « enchanteuse », mais c'est inacceptable pour la même raison que « ami.e » est inacceptable dans la mesure où il ne s'agit que d'une combinaison du masculin et du féminin.

[9] Traduction : Mais certains diraient que le mot « drag-king » est comme « personne »—il a un genre grammatical qui est ce qu'il est, quel que soit le genre d'identification de la personne. D'autres diraient qu'en vertu de ton utilisation du mot « drag-king » et non d'un autre, tu acceptes nécessairement l'assignation de genre grammatical masculin.

> and trans men—this is not saying that trans women, queens, and femmes have had it easy—quite the opposite because this has, at times, made it very dangerous to be femme. My character is presenting alternative understandings of queer masculinity and in this way, Misster E is a King—exploring masculinity without binary of heteronormative expectations of « manhood ».
>
> My performance of drag would be in some way gendered because as an assigned female, growing up as a woman, this project was to explore a confident trans* nonbinary persona. I deeply considered how I would present this persona, whether as a queen or a king or in another form, but the « King » performance is important because it is my exploration beyond normative womanhood.[10] (N. Bonczek, communication personnelle, 25 juillet 2021)

Dans l'intérêt de résoudre la question de manière plus pratique, la rédaction a demandé explicitement :

> Shall we assign masculine grammatical gender to « king » ? You stand by your personal choice of « king » though as a trans, nonbinary persona. But by choosing « king » are you also choosing the *grammatical* gender that almost all French speakers would assign to that word (even, I think, in the form of « drag-king »)? Again, just because one is a trans, nonbinary *personne* (French for « person »), they don't get to eliminate the *grammatical* gender that the language has assigned to the word for « person », which is feminine

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[10] Traduction : Oui, un « king » non binaire peut être genré, mais j'ai assisté à des performances de drag de personnes non binaires qui se présentent comme des kings et des queens aussi non binaires. Je n'ai aucun doute que l'heure viendra quand il y aura un nom pour une performance entièrement non binaire, mais Misster E est un King qui est enchanteur et non binaire et qui brouille des genres comme un commentaire sur la façon dont on peut comprendre la masculinité, et comment on peut faire face à cela. Misster E assume le rôle masculin de King mais sous forme queer et perturbatrice. Le personnage du King est très important pour la déclaration, car ce projet visait à démontrer comment les Queens fems ont été plus « acceptées » ou peut-être présentées comme un spectacle dans la culture dominante, mais les compréhensions alternatives de la masculinité n'ont pas été largement célébrées ni même envisagées. Il y avait et il y a toujours un problème similaire avec les femmes butchs et les hommes trans—cela ne veut pas dire que les femmes trans, les queens et les fems ont eu la vie facile—bien au contraire, parce que cela a parfois rendu très dangereux d'être fem. Mon personnage présente des compréhensions alternatives de la masculinité queer et de cette façon, Misster E est un King—explorant la masculinité sans la binarité des attentes hétéronormatives de la « masculinité ».

Ma performance de drag serait en quelque sorte genrée : comme le sexe féminin m'a été assigné à la naissance, et que j'ai grandi en tant que femme, ce projet visait à explorer une personnalité trans* non binaire confiante. J'ai profondément réfléchi à la manière dont je présenterais ce personnage, que ce soit en tant que queen ou king ou sous une autre forme, mais la performance « King » est importante car c'est mon exploration au-delà de la féminité normative.

> for no reason pertaining to so-called natural gender. (K. Reynolds, communication personnelle, 26 juillet 2021).[11]

Les parties ont finalement convenu que contester le genre grammatical attribué au mot « king » n'était pas nécessaire. L'artiste a retenu l'acception grammaticale de « drag-king » comme performance de la masculinité queer : « Yes, I agree that we should keep the word "drag-king" as it would be traditionally gendered in French. [...] I think it will remain clear and respectful that Misster E is nonbinary, but performing as a King »[12] (N. Bonczek, communication personnelle, 27 juillet 2021). Quand tout le monde était arrivé au point de se sentir à l'aise avec le rendu français de la déclaration de l'artiste pour le tableau « Misster E », un dernier obstacle a dû être affronté : quel était le rôle de l'artiste, le rôle de la traductrice et le rôle de la rédaction dans l'emploi d'un langage qui n'avait pas été affirmé par les institutions gouvernantes de langue française, et qui n'avait même pas été universellement accepté dans le monde francophone trans et non binaire ? Les trois mots « um », « confianx » et « épargnæ » (Bonczek, 2021b) apparaîtraient-ils comme des erreurs à la portion du public lecteur qui n'aurait pas été exposée à ces nouvelles « conventions » encore peu acceptées ? Ces choix justifiaient-ils une explication dans une note de bas de page ? Quel est le rôle de cette revue dans la promotion d'un nouveau langage, et comment remplirait-elle ce rôle de manière plus efficace ? Quelle est la responsabilité de la revue envers son public lecteur ? Quelle est sa responsabilité envers la communauté que Bonczek représente ? Souligner au public lecteur le fait que la revue utilise un langage non confirmé en créant une note explicative exprimerait-il tacitement une réticence à l'accepter ? Ou contribuerait-il à accélérer la compréhension et l'acceptation de l'approche innovante de la part du public ? Au bout du compte, on a décidé que des changements si novateurs n'ont pas nécessairement besoin d'explication, que leur simple utilisation, sans excuses, sans reconnaissance de leur « écart » par rapport à la norme, est le moyen le plus efficace de créer de l'espace pour des « interprétations alternatives de "genre" aussi bien que de sa performance ». Nous avons estimé que le contexte de la déclaration a favorisé la compréhension que des mesures importantes devaient être prises dans le domaine du langage pour refléter les changements souhaités dans la réalité sociale. La version originale anglaise était inconsciemment destinée à guider notre

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[11] Traduction : Doit-on attribuer le genre grammatical masculin à « king » ? Tu t'en tiens à ton choix personnel de « king » quoique trans et non binaire. Mais en choisissant « king », choisis-tu aussi le genre grammatical que presque tous les francophones attribueraient à ce mot (même, je pense, sous la forme de « drag-king ») ? Encore une fois, le fait que l'on soit « une personne » trans non binaire ne lui permet pas d'éliminer le genre grammatical que la langue a attribué au mot, qui est féminin sans raison appartenant au « genre naturel ».

[12] Traduction : Oui, je suis d'accord pour que l'on garde le mot « drag-king » tel qu'il serait traditionnellement genré en français. [...] Je pense qu'il restera clair et respectueux que Misster E est non binaire, mais se comporte comme un « king ».

décision : « I present a more confident self, unharmed by the harsh binaries ». Que faudrait-il de plus pour justifier d'écrire dans la version française, « je présente une image d'um moi plus confianx, épargnæ des binarités dures » ?

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Les rédacteurs en chef

ASHA CABACA

Les pommes sauvages (Le fruit du travail) (2021)

En couverture : Déclaration de l'artiste

Sculpture en bronze. Dimensions à peu près 2,5p x 3p x 2,5p chaque pomme (15 pommes en tout). Créée de quinze pommes sauvages, en utilisant la méthode de coulage en sable.

Selon une démarche qui implique d'être à l'affût et d'observer, mon travail brouille les frontières entre les mondes naturel et fabriqué. Mes sculptures—objets façonnés par la main humaine—semblent être quelque chose de différent, naturel et sauvage à la fois, qui demandent qu'on les regarde de près et souvent deux fois plutôt qu'une. Être à l'affût, trouver et choisir sont des démarches très personnelles qui reflètent notre vision du monde. La nature qui m'entoure me fascine, autant les sentiers des parcs environnants que les forêts de l'Ontario rurale. Les objets qui m'intriguent et que je cueille sont souvent peu remarquables—ou bien trop gros ou trop étranges pour être vrais. Je transforme ces objets, je les recrée en les modelant dans le bronze, la pierre ou le plâtre. Ils acquièrent alors une corporéité, une présence physique qui était à l'origine intrinsèquement temporaire et transitoire.

Je façonne des objets de valeur à partir de choses que la plupart des gens considèrent insignifiantes et inutiles. Une pomme sauvage à la peau plissée n'a pas de valeur; un vieux champignon qui s'accroche à son arbre est inutile; un marron tombé sur le sol peut être ignoré. En recréant ces objets, en les sculptant, je marche sur le chemin étroit qui sépare le réel du non-réel, le naturel du fabriqué. C'est au spectateur de découvrir la nature de ces objets, de discerner s'ils sont réels ou non et d'en apprécier la valeur.

« Ce ne sont pas des vraies ! »

« J'étais sûr que c'étaient des vraies pommes… » (*Quelques réactions du public à mon œuvre*.)

MEAGHAN LANDRY & RYAN YACKNOVETS

Discrimination Against Transgender Nonbinary Teaching Applicants During the Hiring Process

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Transgender and genderqueer people regularly face discrimination, especially when it comes to employment and the hiring process (Hebl et al., 2002; Nadler & Kufahl, 2014; Reed et al., 2015); however, these groups are often underrepresented in psychological research. The current study aims to add to the research literature by investigating potential hiring biases against transgender nonbinary individuals (TNBIs) applying for teaching positions. More specifically, do participants feel comfortable hiring TNBIs as teachers, especially when the job involves working with younger children? A total of 276 participants between the ages of 18 and 53 were randomly assigned to read one of two teaching applicants' résumés, which contained their work experience, education, and additional qualifications. The résumés of both job applicants were differentiated only by the pronouns they used (she/her or they/them), as well as by their membership in a teachers' association (the Association for Teachers of Toronto or the Association for Transgendered Teachers of Toronto). In the current study, the independent variable was the gender identity of the applicant (TNBI or cisgender woman) and the dependent variable was the grade level that participants recommended the applicant teach. We conclude that TNBIs were significantly more likely to be recommended for teaching positions involving older children when compared to equally qualified cisgender applicants, thus revealing underlying discrimination during the hiring process.

Keywords: Transgender, nonbinary, hiring discrimination, teaching, implicit bias

For decades, the LGBTQ+ community has called for greater representation and inclusion of the diverse identities that exist outside of the gender binary, including transgender and genderqueer people. Despite regularly facing discrimination in all walks of life, especially when it comes to employment, these groups are critically underrepresented in psychological research (Everly et al., 2016; Hebl et al., 2002;

Horvath & Ryan, 2003; Nadler & Kufahl, 2014; Reed et al., 2015). The current study aims to increase representation of these groups by investigating hiring biases against transgender nonbinary individuals (TNBIs) applying for teaching positions. Study participants were presented with a brief hiring scenario and one of two hypothetical résumés. The independent variable was the gender of the teaching applicant (either cisgender female or transgender nonbinary), and the dependent variable was the grade level recommended by research participants (junior kindergarten to grade 8). Although this bias could be more accurately described as one of grade placement, bias against TNBI teaching applicants in grade assignment or placement is still indicative of bias within the hiring process. Given the lack of research on this community and the struggles they face, we believe it is important to properly identify this bias as a form of hiring discrimination.

As previously stated, psychological research involving trans and genderqueer individuals is severely lacking. The few studies that do explore these biases (Horvath & Ryan, 2003; Reed et al., 2015; Rad et al., 2019; Norton & Herek, 2013) remain within the male-female dichotomy by choosing to only observe either transwomen or transmen. It is important, however, to attempt to understand the particular challenges and lived experiences of those who identify outside of this binary. Since there is no agreed upon definition of transgender nonbinary presented in psychological research, we opt to define TNBI using various medical articles (Bass et al., 2018; Conlin et el., 2019; Liszewski et al., 2018; Moseson et al., 2020; Valente et al., 2020), as these definitions are clear and accurately reflect those presented in the fields of Trans and Gender Studies (Stryker et al., 2008; Enke, 2012; Tinsley, 2016). Additionally, it is important to note that the acronym "TNBI" was added to this paper for the sake of brevity and is not in any way intended as a medicalization of trans identities. For the purpose of this study, *transgender* is defined as an umbrella term that encompasses any individual whose gender identity does not match the gender they were assigned at birth. Moreover, *nonbinary*, which functions as an extension of trans identity, is defined as an individual who is neither male nor female. Conversely, we defined *cisgender* as an individual whose gender identity matches the one they were assigned at birth (either male or female). The specific question that guided this study was: Will the gender identity of an applicant for a teaching position influence the grade level they are assigned? It was hypothesized that participants would be less likely to hire TNBIs to teach children in the primary level (junior kindergarten to grade 3), when compared to cisgender applicants.

LITERATURE REVIEW

Recently, researchers have attempted to pinpoint behaviours or beliefs that are correlated with anti-transgender and anti-gay attitudes in people. One such belief is the misconception that gay and trans people are in control of their sexuality and gender identity, and make these choices to trick or deceive people (Horvath & Ryan, 2003; Reed et al., 2015; Rad et al., 2019). In their study, Reed et al. (2015) found that participants were more likely to rate transgender people as mentally ill if they also believed that being transgender was a dangerous and rare condition that was under the individual's control. Additionally, Rad et al. (2019) found that participants rated transgender people who had undergone gender confirmation surgery more positively than those who did not. The authors explained that this procedure supposedly signifies a stronger commitment to one's gender identity and reduces the ambiguity of one's gender presentation, making it easier for cisgender people to classify them. Thus, the majority of trans individuals who choose to undergo gender-confirming procedures can still be categorized within the gender binary. TNBIs, however, cannot. As a result, will they be perceived more negatively than other trans individuals because of the perceived ambiguity of their gender?

Researchers also identified heterosexism, political conservatism, anti-egalitarian attitudes, and authoritarianism as good predictors of transphobic attitudes, since they are often associated with intolerance of ambiguity, resistance to change, and rigid beliefs in the binary gender system and its associated gender roles (Horvath & Ryan, 2003; Norton & Herek, 2013; Reed et al., 2015). Furthermore, these studies suggest that ideas about gender roles and the importance of sex are more prevalent among men, leading them to have stronger anti-trans and anti-gay attitudes. This could be attributed to their being more interested in upholding traditional gender norms and power hierarchies (Reed et al., 2015; Rad et al., 2019; Norton & Herek, 2013). According to Norton & Herek (2013), transgender people, gay men, and lesbians challenge social and gender norms, which many men see as a threat to their own masculinity and heterosexuality. TNBIs, however, may challenge these notions more so than other gender or sexual minorities, since they do not adhere to traditional, binary gender norms and presentations. Therefore, we expected that male participants in the current study would be more likely to recommend TNBI applicants to teach older grades, possibly to protect younger children from the perceived perversion of these norms.

Research also indicates that men are more prejudiced towards sexual and gender minorities when it comes to hiring decisions (Everly et al., 2016; Horvath & Ryan, 2003). These studies suggest that men believe there are negative consequences to hiring gays and lesbians (Horvath & Ryan, 2003), and are less likely to hire homosexuals because they perceive them to be less competent (Everly et al., 2016; Horvath & Ryan, 2003). Although women also share some of these biases, Everly et al. (2016) found that they were more tolerant and accepting of gays and lesbians in the workplace. In fact, their study concluded that female participants rated homosexual applicants more favourably than heterosexual applicants.

Other studies on hiring bias suggest that applicants who are assumed to be gay are perceived more negatively than heterosexual applicants (Hebl et el., 2002; Horvath & Ryan, 2003; Irwin, 2002). Hebl et al. (2002) found that participants who entered a store to ask for a job wearing a hat that said “Gay and Proud” faced more interpersonal discrimination (e.g., increased negativity, hostile and unhelpful behaviours, disinterest) than those who entered a store wearing a hat that read “Texan and Proud.” Similarly, LeCroy & Rodefer (2019) found that applicants who were affiliated with an LGBTQ+ association on their résumé (whether they were gay or simply an ally) received a more negative rating. Although these studies do not directly address issues related to bias against transgender people, the results are important, as attitudes towards gays and lesbians are strongly correlated with attitudes towards transgender people (Norton & Herek, 2013).

In terms of hiring bias against transgender people, Reed et al. (2015) asked participants to rate an applicant’s mental health and the degree to which they would recommend hiring them as a radiologic technician after reviewing their résumés. Researchers found that transgender applicants were rated as more mentally ill, which in turn negatively affected the likelihood of their receiving a hiring recommendation. Since Reed et al. (2015) found that being transgender was associated with fewer hiring recommendations, the current study asked: Would participants differentially recommend cisgender and transgender applicants to teach children of different ages? We expected participants to display a grade assignment bias in that they would be more likely to hire cisgender applicants to teach younger children (i.e., at the primary level) than to hire TNBIs for the same position.

METHODS

Participants

This study was done in the context of a class project for a university in Toronto, Canada. Study participants consisted of 276 individuals recruited through email or social media by a group of student researchers. Half (n=138) received the résumé of a cisgender applicant, and half (n=138) received the résumé of a TNBI applicant. Demographic information collected was abnormally distributed, with a greater number of participants being young, female, and South Asian. Although these demographics are not necessarily representative of the Canadian population, they were representative of the pool of student researchers, who recruited from their own social networks.

As shown in Table 1, all the study participants were between the ages of 18 and 53 (*Mean [M]*=22.9, *Standard Deviation [SD]*=7.9, *Median [Mdn]*=19). The majority of respondents identified as female (65.2%) and the rest identified as either male (33.3%) or genderqueer/nonbinary (1.4%). As for ethnicity, participants were allowed to select any and all relevant categories. The most frequent selections were South Asian (26.1%), followed by Western European (19.2%), and Southern European (15.2%).

Table 1. Distribution of Participant Demographic Information

	Cisgender (control)	Nonbinary (experimental)
Age (*Median*)	19.5	19
Gender Identity		
Female	100	80
Male	35	57
Genderqueer/Nonbinary	3	1
Ethnic Background		
African	15	6
Caribbean	4	14
Asian	57	54
European	67	56
Central/South American	8	7

Note. For the sake of brevity, some of the options for ethnicity were combined. For the full list of ethnicities, see Appendix A.

Materials

Study participants read a consent form outlining the purpose of the study, its potential risks and benefits, the estimated time needed for completion, and a reminder of the guaranteed confidentiality and voluntary nature of their participation. This document also provided participants with the names and contact information of the researchers, if they had questions or concerns.

In addition, two hypothetical résumés were used. This method was chosen because it was shown to be effective in measuring hiring discrimination in previous studies (Everly et al., 2016; Horvath & Ryan, 2003; LeCroy & Rodefer, 2019; Nadler & Kufahl, 2014). Both résumés included a (fictitious) applicant's name (Cameron Smith) and preferred pronouns (she/her or they/them). They also contained additional (fictitious) contact information (i.e., home address, email, and phone number); educational background (B.A. and B.Ed. from Queen's University); work history (student teacher at Darwin Elementary [2 years], teacher at Oakland Middle School [2 years], teacher at Richview Kindergarten [2 years]); a short list of relevant skills (organization, teamwork, communication); and membership in a teaching organization (either the Association for Teachers of Toronto or the Association for Transgendered Teachers of Toronto). The items included on the résumés were the same for each applicant, except for their preferred pronouns and the name of the organization they were affiliated with. This information was used to manipulate the gender identity of the job applicant (cisgender or transgender nonbinary), which varied depending on the condition to which the participant was randomly assigned. See Appendix B for the cisgender résumé and Appendix C for the transgender nonbinary résumé.

Next, this study required a Google Forms questionnaire. The first section included four multiple-choice questions: one designed to measure the dependent variable, which is the grade level participants believe the applicant would be best suited to teach, and three other camouflage questions. These questions were included to distract participants from the true aim of the study. The second section included three fixed-choice questions about participants' age, gender identity, and ethnic background (see Appendices D and A).

Finally, this experiment involved passive deception, meaning that at the time of recruitment and in the informed consent page, we did not tell participants that we would be measuring hiring bias against TNBIs for teaching positions, but only that we were measuring factors involved in hiring decisions. As a result, we required a short debrief message which thanked the respondents for their participation, explained the true purpose of the study (i.e., measuring potential hiring discrimination against transgender nonbinary applicants for teaching positions with young children), and asked them not to discuss the study with any other possible respondents to avoid compromising the results.

Procedure

Participants were told at the time of recruitment, as well as on the informed consent page, that this experiment would examine factors involved in hiring decisions. The purpose of this passive deception was to focus respondents attention on the applicants' qualifications and away from their gender identity. The participants were reminded that their participation was voluntary and anonymous, and that there would be no consequences for refusing to participate. The form also gave a brief description of how to complete the study, explaining that respondents would be asked to read a résumé and answer a brief questionnaire. If they selected "Agree," they were presented with a randomization question that directed them to either the control (cisgender) condition or the experimental (transgender nonbinary) condition. This randomization question was a mandatory question at the beginning of the Google Forms questionnaire. Participants were presented with two symbols (@ and !) and asked to choose which one appeared first on their screen. Those who clicked "@" were shown the résumé of a cisgender woman, and those who clicked "!" were shown the résumé of a TNBI. The order of the symbols was randomized by Google Forms.

After being randomly assigned to a condition, respondents in both groups were presented with the following scenario:

> Imagine you are a volunteer member of your local school board and you have been asked to sit on the hiring committee for next fall's new hires. You are evaluating one of the short-listed candidates for an elementary school. Please review this candidate's résumé and answer the questions below.

Participants in the control condition were asked to read the résumé of a cisgender applicant who used she/her pronouns and was a member of the Association for Teachers of Toronto. Participants in the experimental condition were asked to read the résumé of a transgender nonbinary applicant who used gender-neutral they/them pronouns and belonged to the Association for Transgendered Teachers of Toronto. All other elements of the résumé (including name, education, work experience, and skills) remained the same so that both applicants were equal in terms of qualifications. After reviewing the résumé, participants were asked: "Which grade would you most likely recommend this applicant teach?" Respondents were then given the option to select any grade between junior kindergarten and grade 8 (see Appendix D). To analyze participants' responses, researchers then converted each answer into the average age of a child in that grade (e.g., the average age of a junior kindergartener was four years old). This conversion was based on the Ontario school system. The participants were also asked to answer three camouflage questions on a scale of one to seven. Since these questions were only included in the study to further distract participants from the gender identity of the applicants and reduce the likelihood of a social desirability bias, an analysis of these answers was not conducted.

Finally, participants were asked to fill out a short questionnaire. Once their answers were submitted, they received a debrief message.

RESULTS

This study looked at the grade level that participants recommended a cisgender woman and a transgender nonbinary individual (TNBI) teach. As previously mentioned, to compute this data, researchers changed the actual responses (the recommended grade level) to the average age of children in that grade (see Figure 1 and Figure 2).

Figure 1. Frequency Distribution of Scores in the Cisgender Condition

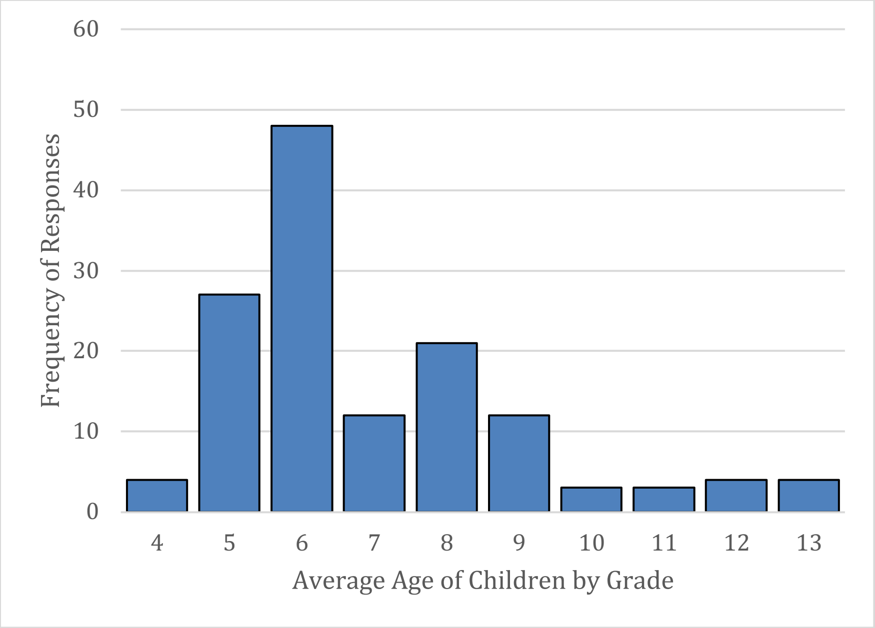
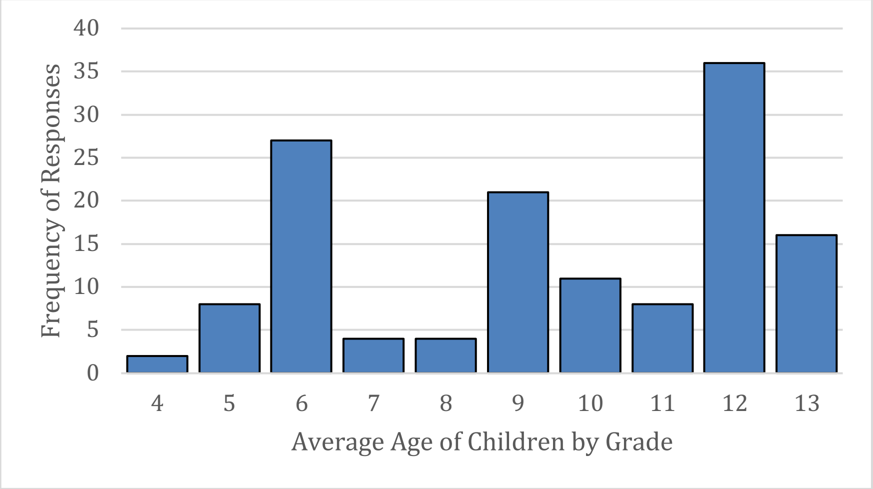


Figure 2. Frequency Distribution of Scores in the Transgender Nonbinary Condition



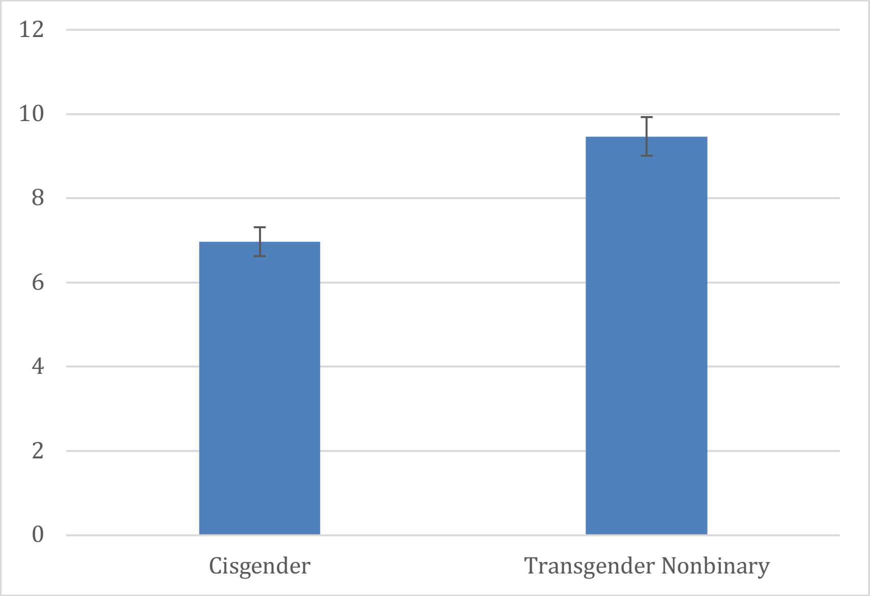
The measures of central tendency, standard deviations and sample sizes (n) for each group were calculated and are found in Table 2. Using the means of the two samples, we performed a two-tailed, independent measures t-test for unequal variances. On average, as shown in Figure 3, participants recommend that TNBIs teach older children (*M*=9.47, *SD*=2.75), compared to cisgender applicants

(*M*=6.97, *SD*=2.06). The difference of 2.5 years between conditions was significant [*t*(137) = -8.56, *p* < .001], which supports the researchers' hypothesis that there is a grade placement bias against TNBIs teaching younger children. Specifically, participants were more likely to assign a cisgender applicant to teach lower grades than a TNBI applicant.

Table 2. Descriptive Results in Each Condition

	Cisgender (control)	Transgender (experimental)
Sample (*n*)	138	138
Mean Age of Children (*M*)	6.97	9.47
Median (*Mdn*)	6	10
Standard Deviation (*SD*)	2.06	2.75

Figure 3. Comparison of Condition Means



DISCUSSION

This study found that, when compared to cisgender applicants, TNBIs were assigned to teach significantly higher grades. In particular, we found that participants were less likely to recommend TNBIs to teach younger grades (junior kindergarten to grade 3) and more likely to recommend that they teach older grades (grades 4 to 8). These results demonstrate a bias against TNBIs when it comes to grade assignment and, more broadly, a hiring bias in child care professions such as teaching. This discrepancy may be due to factors such as perceived mental illness, pre-existing biases in the population, and gender stereotypes. For example, transgender individuals are often seen as deceptive, mentally ill, dangerous, and a threat to the gender binary (Horvath & Ryan, 2003; Reed et al., 2015; Rad et al., 2019). Therefore, it would be reasonable to conclude that such beliefs lead people to be untrusting of transgender individuals, especially in situations involving children. However, studies which explore these negative views are lacking and those that exist to date do not examine biases against TNBIs in particular. For this reason, further studies need to be conducted in order to determine not only how deeply these biases are ingrained in society, but also how they should be addressed. This research should explore the breadth of contexts in which TNBIs may experience prejudice and discrimination, beyond child care and hiring contexts.

The gender of participants may have also played a role in the results of this study. Past research has shown that men are more likely to hold negative biases when hiring sexual and gender minorities (Everly et al., 2016; Horvath & Ryan, 2003). As a result, we would expect male participants to show more bias against TNBIs—for example, recommending that they teach older grades—whereas we would expect female participants to show less bias. Since the majority of participants identified as female (65.2%), this meant that we would expect the results to demonstrate little to no hiring bias against TNBI applicants. However, contrary to the findings of Everly et al. (2016) and Horvath & Ryan (2003), this was not the case. This led us to ask: Does gender play the same role in anti–nonbinary bias as it does with anti-transgender bias? More importantly, can anti-gay and anti-transgender bias be used to reliably predict anti-nonbinary bias? Consequently, future research should focus on answering such questions and on further defining the impact of participant gender.

Another way that gender could have impacted the results is through the cisgender condition. Due to the fact that cisgender women are generally perceived as warm and nurturing compared to men (He et al., 2019; Hoyt, 2012), caregiving scenarios and situational cues often activate gender biases and female stereotypes (Hoyt, 2012). Since the control résumé used she/her pronouns and was assumed to be female, it is possible that the teaching scenario presented at the beginning of this study activated these stereotypes, impacting participants' perceptions of this candidate and resulting in participants favouring her for younger grades. In comparison, transgender individuals are often seen as dangerous and untrustworthy (Horvath & Ryan, 2003; Reed et al., 2015; Rad et al., 2019), which may have triggered the opposite reaction in participants faced with the same teaching scenario. Future research should therefore include additional conditions, such as a résumé with he/him pronouns, to gain a better understanding of the effect of gender identities in this context.

Finally, to the knowledge of the researchers, very little research exists on the topic of transgender individuals and even less on TNBIs. Therefore, this study can be considered exploratory and, given the significance of its results, additional research is essential. Future research should explore questions such as: Is the bias against TNBIs conscious or unconscious? What would be the implication of adding he/him pronouns to a study on hiring bias against TNBIs? Would these results vary depending on the job they apply for (i.e., female- vs. male-dominated professions)? Lastly, would including older students (at the secondary level) increase the recommended grade level in the TNBI condition and consequently increase the difference between the conditions? Such research is an important first step in understanding the discrimination that TNBIs regularly face, in order to combat these biases through education and give rise to changes in policy.

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APPENDIX A

Demographics Questionnaire

Demographic Questions:

1. Age: __________

2. Gender:
   Female
   Male
   Gender non-conforming/nonbinary
   Other

3. Please select the <u>heritage</u> group(s) with which you identify:

____ African
____ South Asian
____ South East Asian
____ Western European
____ Southern European
____ Indigenous
____ Caribbean
____ East Asian
____ Middle Eastern
____ Eastern European
____ Central/South American
____ Other (please specify): __________

APPENDIX B

Cisgender Applicant Resume

Cameron Smith (she/her)

4700 Keele St.
Toronto, ON
(416) 576-xxxx
Csmith@xxxx

Experience

Richview Kindergarten: Teacher
2018–2020
Taught in several kindergarten classes.

Oakland Middle School: Teacher
2016–2018
Taught students in grades 7 and 8.

Darwin Elementary: Student teacher
2014–2016
Student teacher for classes in grades 3 and 4.

Education

Queen's University, English, B.A.
2010–2014
Graduated with honours.

Queen's University, B.Ed.
2014–2016
Graduated with honours

- Primary and Junior Divisions
- Intermediate Division: English

Skills

Very organized.
I work well in groups.
Excellent communicator.

References

Principal T. Sheperd
Oakland Middle School.
C. Hoover
Darwin Elementary School.

Languages

English (oral and written)
French (oral and written)

Other

Member, Association for Teachers of Toronto

APPENDIX C

Transgender Nonbinary Individual (TNBI) Applicant Résumé

Cameron Smith (she/her)

4700 Keele St.
Toronto, ON
(416) 576-xxxx
Csmith@xxxx

Experience

Richview Kindergarten: Teacher
2018–2020
Taught in several kindergarten classes.

Oakland Middle School: Teacher
2016–2018
Taught students in grades 7 and 8.

Darwin Elementary: Student teacher
2014–2016
Student teacher for classes in grades 3 and 4.

Education

Queen’s University, English, B.A.
2010–2014
Graduated with honours.

Queen’s University, B.Ed.
2014–2016
Graduated with honours

- Primary and Junior Divisions
- Intermediate Division: English

Skills

Very organized.
I work well in groups.
Excellent communicator.

References

Principal T. Sheperd
Oakland Middle School.
C. Hoover
Darwin Elementary School.

Languages

English (oral and written)
French (oral and written)

Other

Member, Association for Transgender Teachers of Toronto

APPENDIX D

Questionnaire for Perceived Level of Qualification and Camouflage Questions

Questionnaire:

1. Which grade would you most likely recommend this applicant teach?

   ___ Junior kindergarten
   ___ Senior kindergarten
   ___ Grade 1
   ___ Grade 2
   ___ Grade 3
   ___ Grade 4
   ___ Grade 5
   ___ Grade 6
   ___ Grade 7
   ___ Grade 8

2. How easily do you think this candidate would build rapport with students regardless of assigned grade?

   1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7

   Not easily at all Very easily

3. How easily do you think this candidate would build rapport with colleagues?

   1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7

   Not easily at all Very easily

4. What is the candidate's demonstrated level of commitment to a teaching career?

   1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7

   Not easily at all Very easily

JACOB MCGUIRE

“We Are Not Ill”

A history and analysis of LGBT pathologization

This article aims to partially document and critically examine the ways in which selected LGBT groups have been perceived as mentally maladjusted or deficient by the field of psychology, a process known as “pathologization.” This was accomplished by comparing and contrasting the different ways in which the psychological sciences have attempted to conceptualize various LGBT groups, such as through the creation of formal diagnoses (ex. Sexual Orientation Disorder). This comparison included examples relevant to both historical and modern contexts, documenting the journey LGBT groups have made on the road to societal and clinical normalization. The results of this analysis showed that there are striking commonalities in how groups with diverse forms of gender and sexual expression have been described by psychology, often with the ultimate conclusion that claims a need to “treat” such groups. Additionally, progressive psychological research movements were also included and helped highlight the ways in which psychology has attempted to reverse this “pathologization” at a more systemic level. This research is significant as a demonstration of the power that psychological labels have and their relation to discriminatory practices and equal rights movements.

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Keywords: Pathologization, LGBT, homosexual, bisexual, asexual, transgender

When revisiting previous conceptualizations in psychology, it is apparent that the difference between sexuality and pathology was often unclear regarding how the dominant stream of psychology has historically viewed members of the LGBT community. The distinction between what constituted a legitimate set of sexual and gender identity markers was often overlapping with what was considered a maladaptive affliction that required treatment and correction. This phenomenon, referred to as "pathologization," broadly refers to the medicalization and diagnostic cataloguing of an otherwise harmless occurrence. In the latter half of the 20th century, however, pathologization has been used to specifically refer to medical or psychological problematization (Leibert, 2014). This ambiguity between true pathology and merely variance from heteronormativity is ever-changing. While it has been addressed substantially for some LGBT groups, there are some others which have had their status abandoned and are thus left in a clinical and societal limbo.

This article examines how the distinction between sexuality and pathology has changed over time and how this pattern of evolving reconceptualizations may be consistent with current pathologies that might ultimately be revealed to be misconceptualized. In order to establish a baseline for what constitutes a reconceptualization of the sexuality–pathology distinction, I chose to examine firstly the historical context of homosexuality. Homosexuality stands out as the foremost example of a pathologization of a sexual identity, due to its substantial documentation in the *Diagnostic and Statistical Manual* (DSM). The DSM was, and still is, considered to be the primary handbook for practicing psychologists, a point which will be elaborated on further in the Introduction and Historical Analysis sections. The analysis and historical context of this specific group serves as an anchoring point from which subsequent analyses may be drawn and compared. This provides us with a useful contextual lens which can be used to view where other LGBT groups currently reside on the pathology-sexuality spectrum. As such, potential pitfalls and misconceptualizations may be more readily visible when using the precedent set by the history of homosexuality. However, it should be explicitly stated that such comparisons are intended to be drawn only as a point of speculation and not as an implication that all the mentioned LGBT groups must follow the same path that homosexuality has taken. Instead, it is stressed that these comparisons are made solely as the basis of a larger model which may allow for more groups to be examined and analyzed.

The structure of the article will follow a comparison model beginning with how homosexuality had been conceptualized in the DSM. After providing a timeline that marks the evolution from pathology to a formally acknowledged identity, other groups will be compared. Firstly, a comparison with the pathologization of bisexuality reveals some pitfalls in psychology regarding an inability to conceptualize sexuality beyond a gay–straight binary. Next, a comparison with the pathologization of asexuality highlights problems in the DSM regarding how certain criteria which aim to mark pathology do not sufficiently distinguish themselves from sexual identities. A third comparison addressing the experiences of transgender individuals reveals some practical obstacles involved with the depathologization of certain labels regarding how these terms and diagnoses interact with the ability to be approved for medical treatments. Finally, the pathologization of sexual behaviours is detailed in order to re-emphasize this link between certain diagnostic labels and their influence on other areas, in this case child custody cases. There will also be a discussion of current initiatives in psychology that are actively working to depathologize such groups. Lastly, the conclusion will reiterate the importance of separating personal identity from psychological pathologization.

LITERATURE REVIEW

The types of materials examined in this literature review were twofold. Firstly, original sources of psychological research or associated materials that engaged in the pathologization of LGBT groups were of great interest. The benefits of being able to directly observe how psychology traditionally conceptualized these groups helped provide a direct account of which groups had been adequately documented and which were left relatively unexplored. Secondly, materials that critiqued these original sources were also desired. Such materials helped to provide a basis for how contemporary psychologists were retroactively attempting to reconcile perceived misconceptualization, and helped to elucidate why certain gaps in the literature existed for certain LGBT groups, such as a failure to consider identities which may be misconstrued as a diagnosis. Sources of both varieties were found, but the critical literature was more often selected, as this work already contained relevant entries from the original sources being referenced, thereby circumventing the need for direct consultation with the source materials in most cases.

HISTORICAL CONTEXT: HOMOSEXUALITY AND PATHOLOGIZATION

The most heavily documented LGBT group from the pathologization literature were homosexuals, with a comprehensive timeline for their pathologization provided by Silverstein (2009). Silverstein's article covers the gradual removal of homosexuality as a mental illness from the DSM spanning from its initial release, the DSM-I (1952), until the release of the DSM-III-R (1987). The DSM's goal is to provide a comprehensive list of mental illnesses coupled with their respective symptoms and treatments in order to aid psychologists and psychiatrists in providing care and diagnoses. As such, gay rights activists in the early 1970s organized to have the classification of homosexuality removed from the DSM since, in their eyes, psychiatrists were "one of the 'gate-keepers' of society's attitudes" (p. 161). Silverstein provides a detailed perspective of this movement towards depathologization, as he was personally responsible for presenting the primary proposal to the American Psychiatric Association (APA)'s Nomenclature Committee in the hopes of removing the diagnostic label of "homosexual" (LGBT Center NYC, 2019).

It should be noted that some gay rights activists were willing to accept the psychiatric illness model of homosexuality as a preferable alternative to the societal condemnation of homosexuals based on a perceived immorality (Drescher, 2015). Others, however, rejected this notion and fundamentally disagreed with the illness model as it was seen as an essential element of the morally oriented opposition to homosexuality and not a true alternative. It was this dissenting activist group which, in the wake of the 1969 Stonewall riots in New York City, disrupted multiple APA annual meetings in 1970 and 1971. Ultimately, these activists hoped that the removal of this diagnostic label would help set a precedent for the removal of other legislative restrictions at the state level that banned homosexual activities or prevented homosexuals from receiving equal access to professional certification (Silverstein, 2009).

On February 8, 1973, the APA was approached by an activist committee representing the New York City Gay Activist Alliance that put forward a motion for the removal of homosexuality as a disorder. This motion was adopted on December 15, 1973, and homosexuality was officially declassified retroactively in the DSM-II (1968). However, in its place the new classification of Sexual Orientation Disorder was introduced, with new parameters. Under this new classification only some homosexuals were said to require treatment while others did not, with little elaboration. The introduction of the DSM-III (1980) elaborated on this previous reconceptualization by introducing the terms "ego-syntonic" and "ego-alien" homosexuality.

These new labels were meant to classify which homosexuals required professional treatment (ego-alien)—and as such were classified as suffering from a mental illness—and which did not require such treatment (ego-syntonic). Despite the introduction of these new terms, the actual treatment plan for ego-alien homosexuals was left deliberately ambiguous. This ambiguity was presumably left up to the client and therapist to parse, with treatment options varying from attempting to develop an ego-syntonic sexuality to trying to change the client's sexual orientation entirely. This new model came with criticisms as it appeared to be a surface level change that still allowed for the usage of conversion therapies and the related insurance reimbursements for such treatments (Drescher, 2015). The legitimacy of this decision, however, was seen as justified by the APA due to the option for both heterosexual and homosexual groups to undergo treatment. Finally, the introduction of the DSM-III-R in 1987 marked the removal of Ego-Dystonic Homosexuality entirely. Instead, Sexual Disorder Not Otherwise Specified took its place, described as "persistent and marked distress about one's sexual orientation" (p. 161). The central point worth noting about this new diagnosis was its applicability to any sexual orientation, not just homosexuality. However, whether this reconceptualization was applied in good faith as opposed to an implied or covert pathologization is unclear. For instance, some psychiatrists retroactively label the evolution of these terms as a series of political compromises, rather than an honest attempt to understand whether homosexuality truly aligned with the definition of a psychiatric disorder (Drescher, 2015).

The history of pathologization regarding the place of homosexuality in the DSM not only provides one of the best kept records of the history of the pathologization of a sexual identity, but also helps to provide insight into how a process of reconceptualization may change the ways in which psychology views its subject matter. The constant revision of homosexuality in the DSM demonstrates how the phenomena studied by psychology are not stable and immovable entities, but instead are social constructions that are subject to change and fluidity. As such, psychology's classification systems are not beyond the influence of an external socio-political context. This sentiment is echoed by Silverstein towards the conclusion of his article:

> The activist committee did not discuss the implications that followed from the argument that religion and morality are the foundations of psychiatric theory and practice concerning sexual behavior. We did not want to open that can of worms. We were fighting for our rights as gay people and had no intention to argue for the broadening of the boundaries of acceptable sexual behavior that would have invariably led to increased opposition by conservative professionals, as well as frightening away those who sided with us. (pp. 161–162)

Considering the history of homosexuality detailed here, we are now able to approach the topic of how other sexualities and forms of gender or sexual expression are also subject to these same processes of pathologization. The groundwork laid by the history of homosexuality in the DSM can be used as a litmus test of pathologization for other sexualities and forms of gender or sexual expression which may have their own subordination illuminated more readily by this additional context.

PATHOLOGIZATION BEYOND HOMOSEXUALITY

After exploring the literature more deeply in order to gain a better understanding of how pathologization has affected homosexual individuals, there were still many questions left unanswered. Primarily, there is seemingly less information available with a focus on how pathologization has affected other LGBT and minority groups. This section is dedicated to exploring in greater depth the limited materials which were found regarding these groups. Ideally, this will allow us to attain a greater understanding of how this pathologization phenomenon might be applied to other non-heteronormative groups as well. However, it should be explicitly stated that this is far from a comprehensive list of the materials relevant to these less explored groups. The groups which were selected all have histories that highlight different deficiencies in the ways that psychological conceptualizations operate.

Firstly, bisexuals occupied a unique place in the literature regarding how their pathologization manifested. According to an analysis of psychology textbooks by Barker and Langdridge (2008), there is a strong emphasis on sexuality as a deterministic quality not based in the individual's agency whatsoever. Many of the sources they cite reiterate the position that sexuality is "not a choice" and as such often look towards perspectives such as biological determinism to justify their viewpoints. Barker and Langdridge note that this argument downplays the potential role of free will and politically chosen identities, despite the "not a choice" argument traditionally being used as a means of countering prejudice rhetoric and supporting equal rights advocacy. This context has created a landscape where psychologists are encouraged to conceptualize sexuality in dichotomous terms. As such, the existence of a more varied array of sexualities beyond the gay–straight binary introduces doubt regarding the current negligence of influences which occur later in life and of personal agency. This discrepancy has led to the frequent exclusion of bisexuality from academic study, which is reflected in the few references to bisexuals and bisexuality found by Barker and Langdridge in their analysis. As such, this has led to the labelling of bisexuality as the "silenced sexuality" due to its apparent exclusion from the literature (Barker & Langdridge, 2008).

Asexuals occupied a similar space of negligence and absence in the theoretical frameworks of the literature. Chasin (2014) outlined a wide variety of challenges facing the asexual community, including its pathologization, via an examination of documented asexuality within the current literature. Included was a discussion centring on the current ambiguity between the sexual orientation of asexuality and the pathological affliction of Hypoactive Sexual Desire Disorder (HSDD), defined by the DSM-IV-TR (2000) as a lack of sexual desire paired with distress or interpersonal difficulties. Chasin discusses at length the troublesome nature pertaining to the potential confusion between asexuality and HSDD. The first detrimental component of the DSM's definition is that the criteria listed are likely to be entirely applicable to asexual individuals. Firstly, the majority of asexual individuals do not possess sexual desires. Secondly, Chasin believes that there are several reasons why asexuals would frequently be subject to both distress and interpersonal difficulties. One reason he cites is that asexuals live in a world which has been crafted to be intrinsically sexual. As such, Chasin states that diagnosing asexual persons with HSDD due to "liv[ing] in a world that is inhospitable to asexual people is not only complicit in the persecution of asexual people but actively reinforces it" (p. 173). Additionally, asexual persons are described as more likely to be victims of interpersonal difficulties due to the higher potential for being involved in intimate relationships where one party insists on having sexual interactions in which the asexual partner does not wish to be involved.

Finally, Chasin explores how the pathologization of asexual individuals may be incentivized by clinicians and pharmaceutical companies. This relationship is centred upon the potential to market highly profitable drugs such as Viagra to individuals who possess low sexual desire. The intersectionality between gender and sexuality is considered a reinforcing factor here, with asexual men experiencing social pressures connected to the stereotype of men "always being in the mood." Simultaneously, Chasin cites several feminist sources which claim that Pfizer, the parent company of Viagra, has been looking for a way to market itself to women more effectively after its success with the male market. Potentially, the exploitation of asexual women via pathologization could be one avenue for pharmaceutical companies to break into an untapped market. This incentivized erasure and misunderstanding of asexuality has led Chasin to label asexuals as "missing sexuality," eliciting a related, yet distinct, status in comparison to the labelling of bisexuals as a "silenced sexuality."

Transgender individuals have had a history of pathologization which has mirrored that of homosexuals particularly closely, a topic explored in depth by Drescher (2010). Drescher's article was written in anticipation of the release of the DSM-V in 2013 and draws heavily on the political groundswell surrounding transgender individuals at that time. During that period there was an ongoing conversation centring on whether the formal diagnosis of Gender Identity Disorder (GID) present in the DSM-III-TR should be brought into the not-yet-released DSM-V, a debate reminiscent of the 1973 meeting between the New York City Gay Activist Alliance and the APA.

Many argued that the pathologization of gender variant behaviours was wrong and akin to the pathologization of homosexuality. Others argued that the diagnosis was too important to remove due to its importance in helping transgender individuals gain access to medical and surgical care such as hormone replacement therapy. This point refers to the specific relationship psychological diagnoses have with health insurance providers who often require these labels before approving financial aid for the treatments which their clients seek. Without this label, many transgender individuals fear that they will be trading progressive depathologization for financial abandonment. Again, this situation has many parallels to the previously mentioned division in ideals for gay activists of the 1970s who differed on whether the illness model was an appropriate conceptualization. One of the more practical ramifications of the APA's decision to maintain the illness model through the diagnostic label of "ego-alien" homosexuality present in the DSM-III was that it could have been potentially used for insurance claims for conversion therapy treatment (Drescher, 2015). Ultimately, the DSM-V did include a diagnostic label for transgender individuals under the classification of Gender Dysphoria.

Drescher also discussed how psychology's previous conceptualizations of non-heteronormative groups often resulted in amalgamations of varying groups lumped into a single category (2010). For instance, it was common practice for psychologists and psychiatrists to refer to transgender individuals as homosexual instead of transgender. This particular false equivalence was due to an inadequate distinction between gender expression and sexuality, leading to "homosexual" being used as a catch-all term which could include trans individuals. Drescher cites the sex reassignment surgery of trans woman Christine Jorgensen in 1952 as a groundbreaking moment in the separation of gender identity and sexuality for psychology, along with many other fields. However, the recognition of this distinction did not prevent psychologists from condemning treatments such as sex reassignment surgery for many years due to a belief that transgenderism was primarily founded in delusions (Drescher, 2010). The acknowledgement of the gender identity and sexuality distinction, coupled with the simultaneous belief that trans individuals were suffering from delusions, led to the introduction of their own distinct DSM classifications. In the DSM-III, Gender Identity Disorder of Childhood (GIDC) was introduced as well as transsexualism for adults and adolescents. This historical context is what introduced trans individuals to the pathological conceptualizations of the APA and is also the foundation upon which an ongoing diagnosis is still featured in the DSM today.

Sexual behaviours were not excluded from psychology's pathologization, either (Wright, 2018). Prior to the release of the DSM-V, the DSM had included several classifications for bondage, domination, submission, and sadomasochism (BDSM), fetishes, and cross-dressing. As a result, the stigmatization of these groups was facilitated to the point where these activities had been cited in dozens of child custody cases. In the United States, the National Coalition for Sexual Freedom (NCSF), an organization dedicated to activism for sexual activities between consenting adults, received over 800 reported instances of cases where an individual's engagement in such sexual practices was cited in a child custody battle (Wright, 2018). In response, the NCSF launched the DSM-5 Revision Project campaign in 2008 to report these instances directly to the APA in an attempt to educate the organization on the importance of the issue. The long-term goal of this campaign was to encourage the APA to declassify these activities in order to reduce the legitimacy of bringing forward these sexual behaviours in court cases, alongside the hope of generally greater destigmatization.

FUTURE DIRECTIONS AND CURRENT INITIATIVES

As it stands, psychology has played a major role in the conceptualization of LGBT individuals for both the academic and general communities. Unfortunately, this has led to some troublesome situations where communities and identities have been forsaken by the pathological categories in which they have been placed. Cognizant of this fact, some progressive psychologists have made many attempts to reconcile the harmful effects of this pathologization. Sungur and Gunduz (2014) conducted an extensive comparison of various DSM editions and found that the current DSM-5 has made several improvements in how it conceptualizes sexual dysfunctions. Included in the list of improvements was an overhauled conceptualization of sexual response cycles and how they relate to gender. To elaborate, sexual cycles had previously been constructed linearly with a desire, arousal, and orgasm sequence. The current

DSM has abandoned this model in favour of a more flexible version which allows for greater acknowledgement of sexuality that manifests outside of this rigid structure. Additionally, there has been greater consideration paid to how this cycle may differ as a factor of gender, where one sex may perceive sexuality and its stages differently compared to another. Also, the greater emphasis on distress as a key factor to disorder has been lauded for its attempt to consider more closely the state of the individual prior to concluding that a pathological disorder is present (Sungur & Gunduz, 2014). However, as we discussed earlier in regard to asexuality, distress is not sufficient in and of itself as a marker for pathology.

Barker and Langdridge, mentioned previously in relation to their work on bisexuality, have also made strides in depathologizing psychology through their project *Queering Psychology*. This initiative aims to destabilize traditional understandings of gender and sexual binaries and identities at large in order to foster a greater level of understanding of what truly underlies these terms. The major influences for this project are cited as HIV/AIDS activism as well as second-wave feminism. Other authors previously mentioned also included ideas and concepts that are key to understanding how to move forward. In the context of his article on the pathologization of homosexuality, Silverstein criticized psychiatric diagnosis as being practiced as a form of moral judgement and not as an objective measure. This point tied into another criticism from Silverstein on the influence of Judeo-Christian values pertaining to how this moral position was determined and, subsequently, how diagnoses were shaped. Finally, Chasin also included some additional criticism in his previously mentioned paper. In the context of asexuals, Chasin discusses how clinicians primarily focus on the lack of sexual desire as the main symptom to address for HSDD. Alternatively, Chasin suggests that clinicians instead focus on alleviating the distress associated with sexual encounters without attempting to change the level of arousal. This proposal could be a more apt way of incorporating an asexual-compatible component to the diagnostic process.

CONCLUSION

The pathologization of LGBT individuals via psychology's history of diagnostic classification has created a precarious ecosystem. In this setting, the legitimacy of officially mandated pathologies is delicately intertwined with social ramifications for the involved parties. There is a massive responsibility placed on the shoulders of psychologists and psychiatrists to approach these potentially harmful labels with the caution and forethought that they require. This article has explored the ways in which psychology has both failed and succeeded in ensuring accurate representation over negligent pathologization. The only hope moving forward is that psychology will learn from the deficiencies of previous pathologizing models and listen to those they represent when they speak up and say: "We are not ill."

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DARA DILLON

An Examination of the Irreconcilability of Liberalism and Anti-Black Racism in Canada

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Undoubtedly, liberalism has a vast anthology, yet there remains limited research on how this ideology interacts with anti-Black racism on a macro-scale, and particularly how a Western liberal democratic capitalist society like Canada has dealt with anti-Black racism. Although Canada is a country that prides itself on multiculturalism, diversity, and tolerance, evidence reveals that anti-Black racism is endemic and woven into the fabric of its institutions and policies. In this article, the author exposes the vestiges of discrimination and examines the irreconcilability between anti-Black racism and liberalism. By questioning the prevailing ideology in Canada, the author concludes that liberalism maintains anti-Black racism and the systemic subjugation of Black people. Addressing anti-Black racism cannot be achieved solely through perfunctory policy change, but by dismantling the inherent power dynamics between Black and white people. On this basis alone, anti-Black racism and any discourse around discrimination would provoke the pillars of liberalism and disrupt the order of things.

Keywords: Liberalism, discrimination, anti-Black racism, anti-Blackness, racism

INTRODUCTION

Although work to redress racism has been ongoing, the year 2020 was a critical juncture for grappling with the brutal legacy of historic racism. In 2020, a racial reckoning was initiated in North America, with media outlets, several major corporations, and many other industries expressing vocal support for the Black Lives Matter (BLM)[1] social movement. And yet, months after the deaths of several unarmed

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[1] Black Lives Matter Global Network Foundation, Inc., is a global organization in the U.S., U.K., and Canada, whose mission is to eradicate white supremacy and build local power to intervene in violence inflicted on Black communities by the state and vigilantes (*Black Lives Matter*, n.d.).

Black people, public outcry,[2] performative allyship, and the tremendous moral theatre for equality,[3] there has been little to no change. Instead, there continues to be political stagnation, greater cultural polarization, and very few tangible policy changes. Why hasn't change been realized? I answer this question by critically examining the political doctrine of liberalism. I aim to interrogate and destabilize this prevailing—and seemingly neutral—narrative in Canada, which I argue rationalizes and maintains anti-Black racism. This article contributes to political science, public administration, and policy scholarship.

Liberalism, a dynamic but dominant ideology, embraces individualism and equality and is profoundly embedded in Canada's consciousness. Liberalism views anti-Black racism or *Negrophobia*[4] as a deviant act, one to be denied or denounced. It contends that racism can best be resolved through society's existing institutions. However, I refute this notion. Anti-Black racism is endemic to the Western liberal capitalist democratic society (behaviour and consciousness). It can only be combatted through a complete overhaul of the social institutions[5] which define the society.

Undoubtedly, liberalism has a vast anthology, yet there remains limited research on how this ideology interacts with anti-Black racism on a macro-scale, and particularly how a Western liberal, democratic, capitalist society like Canada has dealt with anti-Black racism. The research that does exist on the relationship between liberalism and anti-Black racism focuses on the institution of education in the context of the United States (Baldridge, 2019; Dumas, 2016); an analysis of liberalism as the canvas and basis for anti-Black racism in Canada remains unexplored. A focus on Canada, a country that prides itself on multiculturalism, diversity, and tolerance, reveals a particular example of how anti-Black racism is profoundly woven into the fabric of Canadian social institutions and policies.

To demonstrate that anti-Black racism is endemic in Canada, I will first contextualize and define the principles of liberalism and anti-Black racism from both historical and contemporary perspectives. Next, I will describe how Canada masks anti-Black racism through ideology, which, in turn, frustrates the change process. The final goal is to establish that Western society's institutional structures and social processes have been historically and systemically designed to subjugate Black people and perpetuate anti-Black racism.

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[2] Ahmaud Arbery, Breonna Taylor, and George Floyd were unarmed Black individuals whose murders in 2020 drew public attention and widespread outcry (*Black Lives Taken: George Floyd, Breonna Taylor, and Ahmaud Arbery | DoSomething.org*, n.d.)

[3] This paper defines moral theatre as pretensive actions of public institutions and the corporate world to create inclusive and diverse laws and policies.

[4] The fear of Black people.

[5] For this paper, social institutions refer to Western culture, liberalism, capitalism, democracy, and bureaucracy.

CONTEXTUALIZING LIBERALISM AND ANTI-BLACK RACISM

Historical Grounding

Liberalism emerged when society was dominated by institutions such as the monarchy, church, and state (Bell, 2014). The ideological notion of liberalism is said to have evolved to provide "… a societal view that prioritized the rights of individuals over the expansive powers of societal and state institutions" (Drougge, 2019, p. 1). Liberalism, in its conception, is a political doctrine that is generally concerned with the value of individual freedom and equality. Drougge (2019) posits that it takes the individual's problem as the central challenge of politics. Essentially, liberals seek to maximize individual equality and individual freedoms and to balance existing tensions between these values. Characteristics of individual freedom include common rights and privileges that are protected by the state, such as: the right to due process and fair trial, the right to political participation, the right to free expression, the right to privacy and personal space, the right to appropriate separation of powers, and the fundamental right to life (Bailey & Gayle, 2003; Bell, 2014; Drougge, 2019; Ishay, 2007). Aside from protecting the individual, liberalism seeks to protect individuals from the state.

Notably, liberalism—the belief in freedom, democracy, equality, and human rights—originated with well-known theorists such as Montesquieu and John Locke (Drougge, 2019). In this early thinking, these principles of liberalism were not designed for the Indigenous people or the enslaved, denying non-whites common rights and privileges. Thus, the idea of liberalism was always entrenched in inequity. For example, according to John Locke, Native Americans did not qualify for private property and privacy because there was a fundamental belief that Europeans (white people) were superior to any other people (Ishay, 2007). This notion of traditional construction, where Indigenous and Afro-descended people were sub-European, drives the discourse on non-universal human rights, which creates the premise of anti-Blackness.

Moreover, society's underlying liberalism, which encouraged ownership, became the driving force for colonialism, slavery, and modern-day anti-Black racism. As such, liberalism justified the actions of the white colonialists as they sought new land, new resources, and cheap labour. Ishay (2007) suggests that applying liberalism's freedom forms the foundation of Western society, where every man sees "in other men not the realization of his own freedom, but the barrier to it" (p. 268). Within this very barrier, white colonialists saw the enslaved (Black people) and Indigenous people as obstacles in their pursuit of conquest and expansion of wealth. However, for McGary (2009), the act of slavery and the process of colonialization is in direct opposition to the principle of freedom. By denying Black people's freedom through slavery, liberalism reveals itself to be an ideology dependent on the idea of negative freedom and maintenance of anti-Black racism (Mills, 2008).

Today, the significant divergence between the claims of liberalism's universalism and the reality of differential human rights and privileges remains up for debate. As time passes and wrongdoings become more flagrant and public, the impact of John Locke's assertion that white people were superior to any other people is coming to the fore. The many exclusions and denials of human rights infringements that occurred in both the colonial and slavery eras have galvanized into newer versions of de facto non-universality, as we see in present-day anti-Black racist acts (Andersen, 2014; Blackstock, 2007; Glenn, 2015; Maynard, 2017). Although slavery has ostensibly been abolished, it is undeniable that anti-Black racism has been maintained by liberalism through institutional structures and social processes.

Contemporary Grounding

While the definitions and literature of liberalism are vast, there is still limited academic research on how the term interacts with anti-Black racism. For this article, the use of the term liberalism generally refers to the normative commitment to "securing individual liberty and human dignity…" (Achiume, 2021, para. 4). Achiume suggests that this idea is best achieved through political theatre (elections), which usually entails representative and democratic institutions, commitments to freedom of expression, and the guarantee of individual property rights. Taken together, these proposed strategies for achieving liberalism seek to limit the legitimate use of the state's authority.

As explained previously, many scholars would argue that liberalism, at its core, is innately good and that liberal democracies are explicitly and implicitly the means through which this good is achieved (Achiume, 2021; Bailey & Gayle, 2003; Baldridge, 2020). Liberalism employs individualism, tolerant attitudes, and reasoned arguments to minimize discriminatory attitudes and prejudiced behaviour against individuals or groups on the grounds of race, both in self and others (of any race) (Lindsay, 2020). It contends that everyone can choose not to hold racist views and be expected to do so. While this may be so, it would be remiss not to note that liberalism was fundamentally built on white European rhetoric (Henry & Tator, 2009; Robertson, 2015).

Within the context of liberalism, individualism creates a value and desire for a pluralistic society that offers many ways of life and opportunities for lived experiences (Kymlicka, 1991). Yet anti-Black racism festers in this type of society. Anti-Black racism refers to the specific type of racial discrimination directed at Black people. According to Marlysa D. Gamblin, Negrophobia, or the overt devaluation of Blackness, includes cases of police or civil brutality against Black bodies (cited in Lindsay, 2020). Dumas (2016) theorizes that anti-Blackness is not just a "…racial conflict that might be resolved through organized political struggle and appeals to the state…," but is also "…an irreconcilability between the Black and any sense of social or cultural regard" (p. 12). Though these interpretations elude a focus on the institutions, it should also be noted that anti-Black racism incorporates Black people's systematic marginalization within the public and social institutions designed to support them (Baldridge, 2020; Cole, 2020). By these definitions alone, the terms liberalism and anti-Black racism appear opposed, and it would seem highly improbable for both to co-exist in the same space. Yet they do.

LIBERALISM MASKS ANTI-BLACK RACISM

Liberalism is the hegemonic system of ideas that guides and justifies the conduct of a class of people, particularly the one that is wholly adopted and maintained (Bailey & Gayle, 2003). People's conceptual frameworks are generally guided by the dominant and become deeply ingrained into their consciousness. In other words, the ideology becomes so embedded in people's everyday lived experiences that it is challenging to identify. This ordinariness allows the liberal and white supremacy ideologies to be retained and reconciled in people's perceptions, inevitably orchestrating power relations (Bailey & Gayle, 2003; Fawcett, 2018). As a result, the lived realities and racial inequalities are often denied. In turn, this brings about the denouncement of the notion of anti-Black racism or its reform. Essentially, if something does not exist, there is nothing to resolve. With liberalism dictating Canada's value system, anti-Black racism is viewed as deviant—going against the social norm.

Liberalism creates a power imbalance and an overall conundrum for racialized groups, disproportionately distributing power and, by extension, social recognition and access to institutions and public services (Fawcett, 2018). This ideological frame is intentionally designed to inform how Canada's political system operates. This does not mean that people are not aware of the racial inequities that exist. For example, the Computer Riot in Montreal (1969),[6] the Yonge Street Protest in Toronto (1991),[7] and the Black Lives Matter protest during the Toronto Pride Parade (2016)[8] demonstrate that Canada is *not* exempt from anti-Black racism. Nevertheless, this

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[6] The Computer Riot was a 14-day sit-in over racism at Sir George Williams University in Montreal (now part of Concordia University) that caused $2 million in damages for the school. Accusations of a university lecturer for unfair and racially motivated grading was levied in the spring of 1968 by six West Indian students (Canadian Broadcasting Corporation & Lindeman, 2014).

[7] The original motivation of the Yonge Street Protest was the acquittal of Rodney King's assailants. However, it escalated to the killing of Raymond Lawrence by two Toronto police officers (Black, 2017).

[8] The Toronto BLM group briefly halted the Pride Parade for 30 minutes until Pride Toronto Executive Director Mathieu Chantelois signed a document agreeing to the group's demands of inclusion within the Pride committee for Black voices and Black space. Another crucial element that was brought to the fold was the perpetuation of "anti-Blackness" against Black queer youth, Black trans youth, and Black trans people (Canadian Broadcasting Corporation, 2016).

widespread denial of anti-Black racism is protected and contained through representative government or political leaders (some form of democracy)—all of which maintain Canada's national image as multicultural and diverse. Andrea A. Davis[9] posits that political leaders such as Ontario Premier Doug Ford have downplayed the magnitude of systemic racism through media and other publications by suggesting that Canada is not like America (Global News, 2020) and, again, masking Black people's lived realities.

Conversely (and ironically), there have been several attempts (what I call the *moral theatre of equality*) to curb anti-Black racism in the province of Ontario through policy and regulatory reforms such as the passing of the Anti-Racism Act (2017),[10] the creation of the Anti-Racism Directorate (ARD),[11] and the launch of the Ontario Black Youth Action Plan (*Ontario's 3-Year Anti-Racism Strategic Plan: Targets and Indicators*, 2019).[12] Nevertheless, anti-Black racism and its impact remain pervasive. As Farah Nasser reports, several lawyers attached to the Civil Law Division (Ontario's Ministry of the Attorney General) were vocal about their encounters with anti-Black and anti-Indigenous racism at work (Global News, 2020). Despite being located in the liberal state of Canada, Black people are denied desire, freedom, and human agency. This denial is expressively exposed in Cole's (2020) account of the hierarchical nature of Canada's public institutions. Cole further postulates that anti-Black racism is compounded by bureaucracy—a rigid, emotionless, rules-based structure designed to benefit one racialized group (white people). Existing legislation and policy changes have been ineffective since they brought no conclusive change to Black people's narratives or lived experiences in the workplace.

Western ideology dictates that individuals are rewarded if they work hard and that economic failure results from a lack of effort or character flaws (Bailey & Gayle, 2003). As such, liberalism claims that all opportunities, freedoms, and rights are equally available to everyone, irrespective of their identity, so racialized groups are not disproportionately affected but rather are unwilling to work hard and be rewarded (Crenshaw, 1991). However, this is a theoretical assertion ignoring the lived realities and racial inequalities that have been structurally produced and

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[9] Chair of York University's Department of Humanities and Coordinator of the University's Black Canadian Studies Certificate.

[10] The Anti-Racism Act, 2017 (ARA) is legislation for the Ontario government to identify and eliminate systemic racism and advance racial equity in the province (*Ontario's 3-Year Anti-Racism Strategic Plan: Targets and Indicators*, 2019).

[11] The Anti-Racism Directorate (ARD) leads the government's anti-racism initiatives to build a more inclusive society, and works to identify, address, and prevent systemic racism in government policy, legislation, programs, and services (*Ontario's 3-Year Anti-Racism Strategic Plan: Targets and Indicators*, 2019).

[12] The Black Youth Action Plan (BYAP) works toward eliminating systemic, race-based disparities by increasing opportunities for Black children, youth, and families across the province (*Ontario's 3-Year Anti-Racism Strategic Plan: Targets and Indicators*, 2019).

maintained. For example, in 2012, racialized Canadians earned an average of seven thousand dollars less per year than other Canadians, causing them to be three times more likely to live in poverty (Christus-Ranjan, 2018). Importantly, the income and employment disparities persisted, regardless of experience or education level (Block & Galabuzi, 2018). Research also shows that race plays a significant role in hiring and accepting Black people in the workforce (Christus-Ranjan, 2018). By creating an ideological illusion that Black people's economic failures are based on individual merit, liberalism bolsters anti-Black racism, masking the existing systemic barriers in Canada's social institutions and policies.

In Canada, liberalism fuels anti-Black racism through covert spaces and conduits such as mainstream media and social media (Cole, 2020). Under the guise of freedom of speech, the media's agenda-setting masks social and economic determinants, where public opinion is intentionally shaped to appease the dominant group in society—in this case, white people (Bailey & Gayle, 2003). Events such as social movements or race issues are often rated for omission or inclusion for dissemination by media outlets. This skewing of public opinion is an ideological practice of tracing the dialectic relationship that exists between public and private space (law enforcement and the citizen). Cole (2020) references several instances in Canada where the media shaped the narrative of police brutality against Black people. However, the media generally presents the filtered information as being unproblematic, and so reinforces liberalism's intentional anti-Black racism.

ANTI-BLACKNESS IS ENDEMIC

With a clear picture of how ideology works, one can understand that any tangible change in a society must be addressed at its roots. The historical complexities of anti-Black racism must be identified, acknowledged, and repaired. Although liberal ideals and discourses of equality result in tokenism[13]—a moral theatre of equality—a deeper analysis of anti-Blackness and white supremacy is lacking. By making a symbolic effort to show racial equality, white people perpetuate the inherent power relations between both groups. For instance, the practice of recruiting Black people in order to give the appearance of racial equity and progress—without reflecting on the deep-seated vestiges of discrimination to make meaningful change—remains ineffective (Dumas, 2016; Lindsay, 2020). Such a practice inhibits individual participation in decision-making and maintains the powerless mindset of Black people (Du Bois, 2007).

Liberalism ostensibly "supports undoing legacies of discrimination" and allows incremental changes (tokenism and veiled inclusivity) but, in practice, this ideology lacks the commitment to redistribute real power and resources (Baldridge, 2020, p. 4). For example, in response to George Floyd's murder, public institutions and the

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[13] Tokenism is an empty movement or perfunctory act with no real impact (Dumas, 2016).

corporate world acted with a slew of well-drafted diversity statements demonstrating the moral theatre of equality (Boynton, 2021; MacAllister, 2021). Though well-intentioned, these token statements often do not redress racial inequities (Boynton, 2021). Therefore, the liberal principle of inclusivity inevitably masks anti-Black racism while ignoring historical complexities and power dynamics.

Canada's inability to commit to the redistribution of power and its overt denial of anti-Black racism perpetuates the cultural disregard for and disgust with Blackness (Negrophobia); anti-Black racism is endemic in Western society. The disdain for Black people is constantly maintained through public institutions (Cole, 2020; Maynard, 2017). The endemic nature of anti-Blackness challenges Canada's image and contradicts the core tenets of liberalism, such as equality, further highlighting the irreconcilability between anti-Blackness and liberalism. As such, it is difficult to grapple with, identify, and respond to the systemic nature of anti-Black racism.

As liberalism in societies becomes increasingly dedicated to the concept of individual rights, freedom, and equality, Black people are systematically deprived of access to resources and institutions. For Cole (2020), Black people are still culturally and socially positioned as the enslaved or chattel placed on earth for the benefit of white people. This idea demonstrates that society continues to benefit European colonists or, in this instance, white people. To address racism through policy change is a perfunctory effort, a means by which white people continue to assert and dictate the right to freedom and right to the consumption, destruction, and simple dismissal of Black people (Dumas, 2016). On this basis alone, anti-Black racism and discourse around discrimination provokes the pillars of liberalism and disrupts the order of things.

CONCLUSION

A Western liberal capitalist democratic society is defined by the ethos and principles of equality, individualism, liberty, rights, and freedom. The mere fact that anti-Black racism is not acknowledged or addressed in Canada's consciousness speaks to the fundamental challenge of systemic racism. Liberal ideology has created a veil, blotting out Black people's reality in Western society. It is in this very society that anti-Black racism reigns supreme. In this article, I have demonstrated that anti-Black racism is inherent to liberalism. Liberal ideology has denied, denounced, and masked marginalized people's realities, which deviate from the value system embedded in Canada's consciousness. Liberal ideology—a value system deeply embedded in Canada's consciousness—has denied, denounced, and masked marginalized people's realities. Under the guise of liberalism, anti-Black racism is prevalent in all public institutions and influences all levels of decision-making. In turn, liberalism establishes the systematic and systemic discrimination of policies and legislation, explaining why little to no tangible policy changes have been achieved. So how do we realize meaningful change?

To realize meaningful change, anti-Black racism can no longer be glossed over without changing Canada's major institutions. Essentially, an issue cannot be resolved using the same philosophy that created it. Any attempt to eradicate anti-Black racism must include revamping institutional structures and social processes while addressing the inherent power imbalances between Black and white people and the historical complexities of discrimination. I hope that the racial reckoning of 2020 creates tangible cultural change—a change in the central institutions of society—not just perfunctory tokenism or a moral theatre of equality.

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AYEDA KHAN

Towards “Revolutionary Medicine”

Examining Western medicine as a colonial tool

This article explores how the field of medicine transformed societal values during the British colonial era, and how it continues to do so by asserting a Eurocentric view of medicine in former colonies. Based on Samir Amin’s claim that intrinsic to the accumulation of profit in empire was the rapid expansion of capitalism within the colonies (1990), I argue that the institution of capitalist relations in British India from the 18th to the 20th century relied heavily on the imposition of Western medicine. The continuing encroachment of these capitalist relationships in the post-colonial era prevents the revival of indigenous medicine and can be classified as a form of neocolonialism. I employ a plurality of theoretical frameworks from various political theorists—namely Federici, Robinson, Quijano, and Harvey—to demonstrate how Western medicine transformed ecological and social relations within the Indian subcontinent to service Britain’s colonial project. Through the use of each framework as a basis of analysis, I discuss how Western medicine altered gender and environmental relations and created new ones centred on race. I show how these altered relations served the underlying colonial project in British India. Finally, I explicate how neocolonial forces, by disrupting ecological relations, have prevented the resurgence of indigenous medicine post-partition. The institutionalization of the specific social and ecological relations necessary to colonialism, and more broadly to capitalism, in the subcontinent were implemented, in part, through Western Medicine.

Keywords: Colonialism, neocolonialism, Western medicine, indigenous medicine, colonial India

In this article, I explore how the seemingly apolitical field of medicine transformed societal values during the colonial era and how that move continues to perpetuate a Eurocentric view of medicine in former colonies. I situate my work within critical medical anthropology (CMA) which addresses the historically specific (re)production of dominant cultural constructions of health while remaining attendant to structures of power such as capitalism (Singer & Baer, 2011). I deploy a neo-Marxian political-economic approach which elucidates the influence of governance on generating inequality within numerous aspects of society, including health. In so doing, I aim to show the dominant role of capitalism in generating health inequality within former colonies and propose that health policy must remain attendant to these factors to produce, in Che Guevara's words, revolutionary medicine.

My argument begins with an overview of Western medicine and pre-colonial indigenous medicine as the basis for subsequent content. Western medicine altered existing social, namely gender and ecological relations, and introduced new social relations based on race. These altered relations served the underlying colonial project in British India. Ultimately, I show how neocolonial forces have further interrupted ecological relations and hindered the resurgence of indigenous medicine post-partition. Based on Samir Amin's claim that intrinsic to the accumulation of wealth in the colonial empire was the rapid expansion of *capitalism* within the colonies (1990), I argue that Western medicine was used as one means of colonization during *the imposition of capitalist relationships* in British India from the 18th to the 20th century. Additionally, the continual imposition of capitalism in the post-colonial era hinders the revival of indigenous medicine and constitutes neocolonialism.

Colonialism is an economic project contingent on the material and psychological exploitation of a native population and lands for the benefit of the colonial state serving the demands of capitalism. The underlying mission of colonialism is the continual expropriation of capital from indigenous people for colonizers *through the imposition of capitalist relations.* In this article, the term capitalist relations references gender, racial, and ecological relations subservient to capitalism's goal of endless wealth accumulation.

MEDICINAL FORMS

The hospital and the laboratory are the features that define Western medicine (Cunningham & Andrews, 1997). The institution of the hospital is associated with a clinical setting that seeks to correlate the symptoms of patients with bodily changes for treatment. Additionally, hospitals are the epicentre of bodily invasion for which surgeries and technology are primarily responsible. Conversely, laboratories are where the causes of diseases are determined and cures are sought, in accordance with the scientific method (Cunningham & Andrews, 1997). Therefore, colonial medicine is generally reductionist in its methodology and often contingent upon the division of the body into isolated parts. Henceforth the terms colonial medicine and Western medicine will refer to British practices within both Britain and India during the colonial occupation of the Indian subcontinent here dated from 1757, the start of the British East India company rule, to partition in 1947.

While numerous forms of indigenous medicine exist throughout the subcontinent, two widely practiced forms, Ayurveda and Unani, will be considered here. Despite the religious differences, with each form practiced by Hindus and Muslims respectively, major similarities exist between them and, prior to colonialism, both *vaidyas*, practitioners of Ayurveda, and *hakims*, practitioners of Unani, worked side by side (Panikkar, 2007). Both practiced within communal settings and utilized a holistic method of diagnosis. Furthermore, indigenous medicine emphasizes diet as the pillar of health and its pharmacology relies heavily on ingredients endemic to the local environment, particularly native plants and wildlife (World Health Organization, 2010). The relationship between human health and the environment is exemplified by the Unani principle *al-asbab al-sitta al-dharuriya* which states that a prerequisite for the health of the body is the health of the ecological surroundings (World Health Organization, 2010). Given the similarities and historical evidence that suggests Ayurvedic and Unani medicine complemented each other (Panikkar, 2007), my use of the term indigenous medicine will reference both forms.

INSTITUTION OF CAPITALIST RELATIONS THROUGH WESTERN MEDICINE

Gender

In my analysis, I do not seek to deny pre-colonial patriarchy but to assert that colonial medicine profoundly changed the character of patriarchal oppression in British India to serve the underlying colonial mission—the imposition of capitalism and its social relations. Of value to this analysis is Marx's conception of primitive accumulation; Marx argues that pre-capitalist economic formations led to structures intrinsic to capitalist accumulation and eventually capitalism (Marx, 1967). Federici, a Marxist feminist and pioneer of social reproduction theory, shows how women's household labour reproduces the male labourer, who sells his labour to capital, therefore reproducing capitalism. She expands Marx's understanding of primitive accumulation to address the systemic oppression women face under capitalism. Federici (2014) outlines three conditions of primitive accumulation, all relevant to the case of colonial medicine:

> (i) the development of a new sexual division of labor subjugating women's labor and women's reproductive function to the reproduction of the work-force; (ii) the construction of a new patriarchal order, based upon the exclusion of women from waged work and their subordination to men; (iii) the mechanization of the proletarian body and its transformation, in the case of women, into a machine for the production of new workers. (p. 12)

For Federici, the removal of 16th-century European women from their female midwife-assisted communal birth settings and their relocation to hospitals where they were subjected to a male doctor's authority provided a case in point. This move served capitalism's need to produce new workers, as male doctors ensured women were not committing infanticide during population shortages (Federici, 2014). The need for the worker—a child—preceded any concern over the woman's health—her body reduced to "a machine for the production of new workers" (Federici, 2014, p. 12). Capitalism's reliance on labour-power, even in its embryonic form, was inextricably linked with patriarchal oppression and lent itself to the creation of a singular system of patriarchal capitalism.[1] The shift in the control over the birthing process demonstrates a parallel between the experiences of European and Indian women satisfying Federici's third condition of primitive accumulation. In pre-colonial India *dais* (midwives) and women within the family were all present during the home birthing process; the British argument that hospitals, a pillar of Western medicine, better serviced women's needs disrupted the tradition. Though the pro-hospital argument has some validity, represented by the fact that three out of 20 women died in the home birthing process (Samanta, 2014), the statistic is not direct evidence of the relative inefficacy of indigenous medicine, as it was purported to represent. The primary reason for the high mortality rates was a lack of training in indigenous medicine afforded to lower-caste *dais* (Samanta, 2014). Nevertheless, hospital birthing with British male doctors was forced upon local women to ensure a higher survival rate of indigenous labour which supported the colonial project.

Accompanying the rise of hospital births and British concern for women's health (read production of labour) was a new colonial conception of motherhood instituted through the dissemination of a slew of literature authored by British doctors. The literature recommended pregnant women should not engage in any labour, and that other women take over household duties, a stark contrast to pre-colonial values where pregnant women continued to work (Samanta, 2014). This ban subjugated women's labour, in this case labour during gestation and birthing, to the reproduction of the workforce. While women in pre-colonial India were involved in a sexual division of labour, this division—under colonialism—began to service the reproduction of labour for capitalism. These normative directives created a new sexual division of labour, leading to the subjugation of women's bodies' labour to the reproduction of the workforce: the first principle of primitive accumulation.

Though women in pre-colonial India were mostly relegated to work for the household, this sphere encompassed a plurality of tasks that extended far beyond a reproductive role. Indeed, Ramaswamy (2010) notes that women commonly worked such diverse tasks as oil extraction for cooking and farming. This is in sharp contrast to the "new" definition of women as prescribed by hospital literature, which confined women to a much narrower definition of the household. The literature defines the wife as subservient to men and assigned to unpaid European Victorian-era household

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[1] The term patriarchal capitalism will be used throughout this paper for the purposes of distinguishing indigenous patriarchy from capitalist patriarchy though Federici does not address this distinction.

tasks (Samanta, 2014). In contrast, though many women were confined to the household within pre-colonial India, this did not assume an exclusion from paid labour (Ramaswamy, 2010). Therefore, a new patriarchal order where women were excluded from paid labour was made possible by Western medicine's "new" expectations of an Indian woman: one which confined her knowledge and now unpaid labour to an ever-shrinking definition of the household, satisfying the second condition of primitive accumulation.

Race

Unlike patriarchy, white supremacy did not exist in pre-colonial India. Cedric Robinson (1983), a critic of orthodox Marxism's neglect of race, introduced the notion of racial capitalism—the conception that primitive accumulation in Western Europe was contingent on the racialization and racial exploitation of the intra-European population with the object of racial exploitation changing over time from the Irish to Slavs, etc. Therefore, racialization and racial exploitation were intrinsic to the process of capitalist accumulation *within* Europe. Notably, due to capitalism's constant need for new markets, this racialization took on an inter-continental outlook during the era of colonialism and reduced the need for intra-European subjugation. As part of that move, the British colonial project introduced racial capitalism into British India, which was contingent on *the racialization of the indigenous population*. The methods by which racialization occurred can be understood using the concepts of knowledge perspective and coloniality of power as posited by Aníbal Quijano—a Peruvian decolonial Marxist scholar whose work has implications for the Indian context.

Quijano's (2000) concept of knowledge perspective articulates the racial bias associated with the superiority afforded to Western thought, consistent with the introduction of a racial hierarchy within the field of medicine in the subcontinent. This move is emphasized by Bengali obstetrician, Dr. Kedarnath Das, who spent twelve years redesigning British forceps, a surgical instrument utilized during births, to meet the specifications of the average Bengali woman's physicality only to have his achievement dismissed by British doctors on the grounds that "a man . . . cannot carry about with him a number of forceps" (Samanta, 2014, p. 123). Here, Das's assimilation into Western medicine was not enough: this critical examination of Western thought or fusion with indigenous knowledge by an Indian was thought to be inferior, or even a rebuke. Similarly, in 1909 the Indian government's proposal to open superior positions to Indians in medicine was met with swift condemnation from the Indian Medical Service (IMS) (Kumar, 1997). One IMS surgeon went so far as to state that "moral stamina, self-reliance, and self-confidence are not yet ripe for the Indian [who] . . . falls back upon the primitive and prehistoric treatments [indigenous medicine]" (Abbot, 1908, as cited in Kumar, 1997, p. 179)—a comment was made in reference to Indians who had been trained in Western medicine in

Europe. Not only was Western medicine upheld as the gold standard, but any attainment of Western knowledge by Indians was met with the suspicion of "regressing" to an inferior (read indigenous) mode of reasoning. An example of the paternalistic attitude associated with the assumption that Western medicine would "fix" the indigenous population's health is Queen Victoria's declaration, upon receiving reports of Indian birthing practices, that "something must be done for the poor creatures" (Samanta, 2014, p. 112). Each of these examples reinforces that the introduction of racial hierarchy is paralleled by an emphasis on the superiority of Western medicine.

The coloniality of power, as conceived by Quijano (2000), is a "pattern of world-power" (p. 218) dependent on racial classification expressed through a plurality of forms. Two of these are the distribution of work and the privileging of "Whiteness" as it pertains to salary (Quijano, 2000). The new distribution of work within the subcontinent was expressed through the professionalization of Western medicine and the concomitant undermining of indigenous medicine. As medicine became increasingly associated with care in the hospital, the abode of Western medicine, it became more difficult for the indigenous population to obtain medical certification because of the European university requirement. The distribution of medical work thereby shifted, and complaints were made by indigenous doctors about the lack of higher rank and salaried positions given to indigenous doctors (Kumar, 1997), indicative of systemic discrimination. While there were limited numbers of European doctors in India, given that the Indian population greatly outnumbered the few settlers, within the upper ranks of the IMS, European doctors were a majority presence. Indeed, one Indian doctor explicitly noted that one often finds Indians relegated to lower positions whilst less qualified European doctors ascended the ranks (Kumar, 1997). This double movement within the ranks and redistribution of work through racial bias is evident and led to the widespread understanding among Indian doctors that "Whiteness" translated to higher paying positions.

Nature

Adding to colonial change, Western medicine's view of nature was consistent with the Enlightenment era's conception that nature was something to be conquered. The aggressive language deployed by Western doctors when they declared war on a host of diseases (Lee, 1997) that involved insects—creatures of nature—is just one example. In contrast, an understanding of the mutually beneficial relationships between all beings is clear within the Unani principle *al-asbab al-sitta al-dharuriya,* whereby human health is contingent on the health of the earth. Suppressing indigenous medicine led to severing the pre-colonial relationship to nature and replacing it with Western medicine's agonistic worldview.

The defilement of indigenous medicine was further instituted through the Indian state apparatus, which catered to the forces of primitive accumulation. The forces of primitive accumulation are contingent upon a conception of the state as having a monopoly over the meanings of legality (Harvey, 2003). In this way, the decline of the indigenous relationship with nature was amplified through the Indian legislation's *restrictions* on indigenous medicine. This move indirectly promoted the status of Western medicine, furthered by the lack of funding allocated to indigenous medicine by the Indian state. A clear example is the 1822 Indian government's rejection of legislation giving indigenous doctors the same rights as doctors practicing Western medicine (Kumar, 1997). Indigenous medicine was dealt another blow in 1912 when the Registration Act barred any state patronage of indigenous medicine. Although extensive lobbying prompted the Indian state to open a few indigenous medical colleges in 1916 (Kumar, 1997), this measure of reform proved to be ineffective as most of these colleges no longer exist. Overwhelmingly, legislation led to a weakening relationship between Indians and nature including the severance of the pre-colonial insistence on a harmonious relationship.

NEOCOLONIALISM IS PREVENTING THE RISE OF INDIGENOUS MEDICINE

Moving out of history and into the current context, neocolonialism continues the underlying mission of colonialism: the proliferation of capitalist relations. Neocolonialism, however, takes into account the shift in global power balance between the colonial times Britain-dominated world order and present-day American hegemonic influences. Which nation perpetuates these relationships is inconsequential, as it is the proliferation of capitalist relations within the subcontinent that prevents the resurgence of indigenous medicine and *deepens the reliance on Western medicine*. Overall, environmental capitalist relations persist and prevent the rise of indigenous medicine.

Many who argue that indigenous medicine has been embraced in the "post"-colonial era point to the World Health Organization's (WHO) implementation of the Alma Ata declaration in 1978, which formally articulated an indigenous-inclusive definition of healthcare—albeit only in the primary healthcare sector (Lee, 1997). Failure to meet the progress markers of Alma Ata, namely the Millennium Development Goals and the Health for All initiative by 2000 (Walley, 2008), demonstrates a lack of indigenous medicine resurgence, despite the WHO push. I assert that the inability to revive indigenous medicine is a consequence of the exogenous influence of capitalist America in continuing to shape environmental relations in post-partition India.

The link between the degradation of the environment and the inability to practice indigenous medicine is encapsulated by Indian environmental scholar-activist Vandana Shiva's (2018) statement that "there is an intimate connection between the soil, plants, our gut and brain." If there is an inability to produce food that is free of pesticides, then there is an inability for indigenous medicine to be practiced as it relies heavily on the surrounding ecological conditions. Shiva articulates how

American influence has promoted technological interference in post-colonial India's agriculture during the so-called Green revolution starting from the 1950s. The Green revolution was a shift to monocrop agriculture made possible by the heavy reliance on foreign agents such as pesticides. Shiva (2015) notes, "advisors and experts came from America to shift India's agricultural research and agricultural policy from an indigenous and ecological model to an exogenous and high-input one" (p. 22). The American agricultural agenda in India was insistent on the import of foreign seeds and fertilizers as integral to the mass production of food, creating Indian dependence on America. The World Bank and American government were heavily involved in creating this dependent relationship leading to the mass production and export of crops from India to the Global North at the expense of India's environment. Note here *the imposition of capitalist values* as it pertains to the environment in India. The American plan was contingent on the domination of nature, which is antithetical to the Indian agricultural notion of a partnership between the people and land. This coerced adoption of American agricultural methods and its associated value-system constitutes a significant dimension of neocolonialism. The adverse effects on the Indian environment were realized much later coinciding with the WHO's promotion of indigenous medicine. Given that indigenous medicine is reliant on contaminant-free soil and local plants for pharmacology, the so-called Green revolution prevented its revitalization through the reassertion of Western ecological relations. This "revolution," an American neocolonial project, which Indian farmers assert was responsible for the degradation of the soil and more broadly, for "the decline in the strength of the land" (Saha, 2013, p. 216) severely hindered the resurgence of indigenous medicine in the post-colonial era.

The institutionalization in the subcontinent of specific social and ecological relations necessary to colonialism, and more broadly to capitalism, began its gradual incursion, in part, with the introduction of Western Medicine. Through newly introduced gender relations, women were removed from their gender-exclusive communal birthing process and transplanted into male-dominated hospitals. This transition gave rise to a host of new economic relations based on the relegation of women into a much narrower definition of the household in which the reproduction of the workforce depended on women's unpaid labour. My examination of racial capitalism demonstrates how the racialization of indigenous people was necessary for British colonial control. Western medicine placed white doctors at the top of the pay grade and placed Western thought as racially and culturally superior to indigenous medicine. The severance of the harmonious relationship between Indians and the earth was furthered by an Indian state that supported capitalist expansion. Moreover, American capitalism orchestrated and expanded colonial relationships in the so-called post-colonial era, preventing the re-emergence of indigenous medicine. My article reveals how Western medicine contributed directly to the historical destruction of pre-colonial relationships between people and their environment and to the perpetuation of the colonial project. Today, this continued interference hinders the recovery and reinstitution of indigenous medical epistemologies and practices in areas that need it the most.

Western Medicine, through colonialism, (re)produces patriarchal capitalism, racial capitalism, and ecological extractivism—maintained today by neocolonial intrusions within former colonies. The inefficacy of Western Medicine in the rural Global South is well-documented: Kumar et al. (2014) show that "in a country like India, where physical distance to health facilities is quite large in rural areas, access is a significant barrier" (p. 4101) to reaching a hospital—the Western centre for care. Subversion of indigenous medicine then moves beyond epistemological injustices and into life-or-death consequences, especially for rural people. The reluctance of mainstream health-policy discourse to engage with pluralistic, historically specific definitions of well-being along with the global structures of power installed during colonialism and reproduced today leads to band-aid reformist solutions. These measures seek to address the *effects* of global inequality manifested in Western healthcare instead of getting to the *causes* of inequality. By engaging with the role medicine played in colonialism and the creation of global inequality, I have historicized the root causes of health inequity. I suggest a path towards revolutionary medicine where the necessity for medicine to combat the effects of global inequity no longer exists. Revolutionary medicine, however, can only be realized once the structures of power that produce inequity are dismantled; and for this to happen, we must recognize colonialism's origins and its effects on the practice of medicine. It is my hope that this article offers a step forward on a path that leads us away from band-aid colonial solutions and towards a "revolutionary medicine."

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JACQUELINE SAUNDERS

Challenges for Children with Epilepsy and the Need for Specialized Transition Programs

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This literature review analyzes current research about children with epilepsy and the necessity for specialized transition care programs. It focuses on transition care programs in Canada, which assist individuals with chronic illnesses to switch from a pediatric healthcare model to an adult healthcare model. It explores challenges faced by children with epilepsy that make maintenance of the condition variable for every individual, and how these challenges contribute to the necessity for transition care programs. Despite multiple initiatives across Canada that advocate for the need for transition care programs due to the cognitive, psychological, and developmental challenges children with epilepsy experience, results demonstrate that transition programs are often temporary, and more programs need to be implemented to be available to families of children with epilepsy. Due to the complex nature of epilepsy, the age of transition with its increased risk of psychological and cognitive challenges, and often additional comorbidities, specialized transition programs are required to ensure optimal treatment is maintained. It is crucial that healthcare professionals be equipped with the skills for planning around special healthcare needs, follow evidence-based transition plans, and ensure access to services for individuals going through transition. Results also show transitioning youth are unprepared and parents are not informed about transition programs. Multiple resources found facets of a good transition program include a multidisciplinary team, collaboration between healthcare and families, a family-centred approach, educating families and patients on condition, and a unique plan for each individual. Future research should further explore and define the qualities of a successful transition care program.

Keywords: Epilepsy, childhood epilepsy, transition care programs, epilepsy healthcare, challenges in epilepsy, health-related quality of life, epilepsy outcomes

INTRODUCTION

Participants

Epilepsy is one of the most prevalent neurological disorders, affecting an estimated 50 million people worldwide who live with the condition. Onset often occurs before the age of 30 (Gilmour et al., 2016). Diagnosing epilepsy is complex; it is based on an assessment of symptoms, brain correlates, and cognitive outcomes. Treatment and control of the disorder requires a multidisciplinary team consisting of parents, physicians, and other healthcare providers to ensure optimal medical and developmental care. Epilepsy is a long-term condition and is more prevalent among children than adults (Kotsopoulos et al., 2002); seizures are the most common neurological emergency in the neonatal period (Pressler et al., 2021). Epilepsy affects children into adulthood and treatment can be complicated and life-long (Reger et al., 2018). People with epilepsy are at higher risk for emotional, behavioural (Davies et al., 2003), academic (Puka & Smith, 2016), and adaptive disorders (Papazoglou et al., 2010), which can affect their ability to manage their own care, i.e., the conceptual, social, and practical skills required to perform daily life tasks. Managing epilepsy requires ongoing monitoring because the clinical status of the condition can change throughout an individual's life and classification changes are common (Hanaoka et al., 2017). Childhood onset entails switching from a pediatric healthcare model to an adult healthcare model including changing physicians, increasing responsibility for treatment monitoring, and changing from family-centred to patient-responsible care. These programs aim to improve patient outcomes and are targeted for chronically ill patients who often experience unnecessary and poorly coordinated care, worsening health outcomes, poor mental health challenges, and additional family and friend burden when switching healthcare models (Weeks et al., 2020). Although there have been numerous initiatives advocating for implementation of transition care programs through organizations such as the Government of Canada, the Ministry of Health and Long-Term Care Ontario, and Critical Care Services Ontario, there is limited literature looking at effectiveness of transition programs. Programs are not easily accessible or abundant, and only 15% of families are having transition discussions (Baca et al., 2018).

The goal of this literature review is to determine if there is a need for specialized transition care programs for children diagnosed with epilepsy in Canada. Additional research questions explore the characteristics of effective transition care programs and identify gaps and future steps.

EPILEPSY LITERATURE REVIEW

Epilepsy Overview

Epilepsy is a disorder of the brain and was once defined as having two unprovoked seizures less than 24 hours apart. Presently, a seizure is defined as "a transient occurrence of signs and/or symptoms due to an abnormal excessive or synchronous neuronal activity in the brain" (Fisher et al., 2016); in other words, there are excessive neurons firing in the brain which could result in observable or unobservable symptoms. Multiple factors affect the nature of seizures such as age, genetic predispositions, brain injuries, and medications (Fisher et al., 2016). The International League Against Epilepsy (ILAE) Classification of the Epilepsies provides current classification criteria for epilepsy and is the most widely used system worldwide in epilepsy research and provision of care (Fisher et al., 2014). According to the ILAE, a practical definition of epilepsy includes any of the following three criteria: at least two unprovoked seizures less than 24 hours apart, one unprovoked seizure and probability of further seizures occurring sometime over the next 10 years, and diagnosis of an epilepsy syndrome (Fisher et al., 2014). There are three levels of labelling epilepsy in the ILAE system. Level 1 identifies a seizure type determined by the area where the seizure happened in the brain (e.g., *Focal onset* means a seizure in one area, *generalized onset* means a seizure in both hemispheres, and *unknown onset* means it is unknown where seizure started). Level 2 determines the epilepsy type, which is based on seizure type. Level 3 determines a diagnosis of Epilepsy Syndrome once a characteristic group of features is identified (Fisher et al., 2016) based on ILAE guidelines. When there is not enough information available about an individual's condition, or when there is limited access to diagnostic methods such as neuroimaging, seizure type may be the only level of diagnosis (Scheffer et al., 2017).

Clinical diagnosis of epilepsy is multiaxial and based on seizure type(s), syndrome, etiology, and family history as determined by a neurologist with specialist training in epilepsy. Each epilepsy diagnosis is unique, and people may have more than one categorization depending on the complexity of the presentation.

Biological & Developmental Outcomes

Early onset epilepsy requires a child to navigate the challenges of typical development in addition to the challenges associated with an epilepsy diagnosis. Camfield et al. (2017) summarized findings from the 2016 Paris 2nd Symposium on Transition in Epilepsies that emphasizes four factors to consider during transition age: brain matter changes, endocrinological changes, sexual development, and psychological development. Endocrinological changes of puberty can have an effect on the incidence and expression of seizures, and the resulting stigma may affect formation of peer relationships.

Psychological & Neurological Outcomes

Executive Functions

Executive functions (EFs) are a set of higher-order mental processes responsible for goal-directed behaviour, decision making, abstract thinking, and cognitive flexibility. EFs play a key role in adaptive functioning (i.e., the ability to navigate the demands of daily life) (Sirois et al., 2016). Importantly, adaptive functioning affects Health-

Related Quality of Life (HRQOL) (Sherman et al., 2006), which is often reduced in children with epilepsy (Modi et al., 2011; Conway et al., 2018) and is possibly a result of EF deficits (Parrish et al., 2007; Sherman et al., 2006). Sherman et al. (2006) found several subsets of neuropsychological measures were predictors of HRQOL; lower HRQOL scores were associated with lower adaptive functioning. Reduced adaptive functioning can result from uncontrolled seizures (Papazoglou et al., 2010; Parrish et al., 2007). This is challenging because one third of people diagnosed with epilepsy live with uncontrolled seizures (Shafer & Sirven, 2013). Children with active epilepsy have higher rates of anti-epileptic drug (AED) use which can also affect HRQOL (Papazoglou et al., 2010). Modi et al. (2011) demonstrate improved HRQOL once complete seizure control was achieved and conclude that AED use and seizure control affect HRQOL. Different AEDs produce different deficits in EF, and different epilepsies produce different cognitive deficits (not always resulting in adaptive functioning issues) (Culhane-Shelburne et al., 2002).

Depression

Patients with epilepsy are at risk for depression, with different epilepsy conditions and seizure locations yielding different risk rates (Schraegle & Titus, 2017; Zhao et al., 2012). Children with epilepsy often have anxiety disorders and display suicidal ideation (Caplan et al., 2005). Psychopathology can present challenges to healthcare professionals (Reilly et al., 2013), making it prudent for physicians, clinicians, families, nurses, and other related healthcare professionals to collaborate to provide appropriate and comprehensive treatment for each individual case.

Social Outcomes

Impairment in neuropsychological functioning puts children with epilepsy at risk for social challenges (Drewel et al., 2009). Raud et al. (2015) evaluated the performance of attention, verbal executive, and fine motor tasks and describe EFs as significantly affected by type of epilepsy and age of onset. Moreover, the most significantly affected facet of EF was Theory of Mind, an abstract cognitive process that helps control social cognitive skills and may determine one’s ability to perceive the beliefs of other people.

Health-Related Quality of Life in Epilepsy

Treatment

Epilepsy treatments vary depending on seizure type and epilepsy type. The most common treatment is AEDs, of which there are 35 different types. Surgery is the next common treatment, but additional therapies include neurostimulation (vagal nerve), diet therapy, and alternative therapies (Schachter et al., 2013). Approximately 30-40% of people have drug-resistant epilepsy (Kiriakopoulos & Shafer, 2018), so their options are to consider invasive techniques such as surgical or stimulation-based treatments (e.g., responsive neurostimulation and deep brain stimulation) (Morris et al., 2013).

Seizure Control

Seizures can be controlled by AEDs and surgery for some individuals, and seizure control has been associated with increased HRQOL, although side effects from AEDs are negatively correlated with HRQOL (Modi et al., 2011). Some AEDs present a higher risk of cognitive and behavioural impairments (Burns et al., 2018). Factors that affect the quality of life in an individual with epilepsy are seizure frequency, control, and location; epilepsy type; and treatment methods. Monitoring treatment success (i.e., seizure control) is an integral part of managing the condition. Patients with active epilepsy had lower rates of academic achievement and higher rates of unemployment (Baca et al., 2018). Furthermore, active seizures are associated with depressive problems (Tavares et al., 2015), and frequency of failed medications can result in a "learned helplessness" mentality which affects HRQOL and highlights the importance of constant medical support throughout treatments (Sherman et al., 2006).

Healthcare Services

Healthcare quality has a major impact on epilepsy treatment and HRQOL. Having access to services, discussions with doctors about conditions and further treatment, medication compliance, and knowledge of the condition all affect quality of life (Baca et al., 2018; Chappell & Smithson, 1998; Gray et al., 2017). Sixty percent of patients with epilepsy were rarely or never satisfied with the amount of information provided by their doctor; 92% of patients with frequent seizures reported no changes in treatment (Chappell & Smithson, 1998). Coker et al. (2010) propose that there is a need for healthcare professionals to improve educating patients about their condition because patients did not have a full understanding of their condition or its treatments. Despite research showing that knowledge of a condition can have a significant effect on intellectual, social, and emotional aspects of quality of life, doctors are not providing enough information about epilepsy (Gray et al., 2017). The preferred choice for treating and maintaining epilepsy consists of a multidisciplinary team (Chappell & Smithson, 1998).

Transition Programs

Transition Period

Epilepsy treatment is often lifelong, with significant differences between pediatric and adult healthcare models. Pediatric healthcare is family-oriented, emphasizes parental involvement in decision making, provides easier access to resources (i.e., clinics and hospitals may offer services needed for children in one place), and offers a warmer environment. Adult healthcare emphasizes patient independence, increased responsibility, and autonomy in accessing resources, such as choosing members of your healthcare team or finding specialized clinics (Castillo & Kitsos, 2017). However, individuals with epilepsy may be unable to take responsibility for the medication and treatment of their condition, may be unable to determine best fit for team members, or may not know where to access specialized healthcare.

The "transition period" for a child with epilepsy occurs when changing healthcare models at some time between the ages of 18 to 25 years, depending on the healthcare system. This age range is already developmentally, socially, and psychologically a challenging time for people without chronic health conditions. It can be especially challenging for individuals with epilepsy because of their increased risk of cognitive and neuropsychological challenges. Due to the variability in outcomes, comorbidity, and challenges with neuropsychological, developmental, and social functioning skills in children with epilepsy, physicians need to be informed and prepared for comorbidity and understand how these challenges may affect the ability of individuals to maintain their condition or treatment.

Healthcare programs must support the individual moving from pediatric to adult healthcare through a specialized transition program that emphasizes family-centred models and collaboration between families and healthcare providers. Key elements for ensuring a successful transition include guaranteeing that all young people with epilepsy have an identified healthcare professional equipped with the skills for planning around special healthcare needs, identifying knowledge and skills required to provide appropriate healthcare for patients with epilepsy, using evidence-based written transition plans, and ensuring access to services for individuals through childhood into adulthood (Castillo & Kitsos, 2017).

History and Prevalence

Canada acknowledged the importance of transition care programs on September 11, 2000, when the Government of Canada established the Primary Health Care Transition Fund (PHCTF) worth $800 million (Health Services, 2007). This initiative emphasized the importance of a multidisciplinary team and listed common objectives for the programs: improved access; emphasis on health promotion, disease and injury prevention; chronic disease management; 24/7 access to essential services; and coordination with other health services. The Canadian Collaborative Mental Health Care established in 2006 advocated for people with mental illnesses and the importance of a collaborative care team, but this program only lasted two years (Dudgeon, 2006). The Canadian Institutes of Health Research implemented a Transitions in Care initiative: a multi-pillar and trans-disciplinary initiative designed to optimize transition care outcomes through research on changing health status or care in key populations (CIHR, 2021). In 2011, the Ministry of Health and Long-Term Care in Ontario implemented a transition working group to design a framework guideline for transitioning healthcare that included a multidisciplinary team ranging from physicians (pediatric and adult), epileptologists, psychologists/psychiatrists, neurologists, nurses, social workers, community representatives, specialists, parents of epilepsy, and patients of epilepsy (Andrade et al., 2017). The framework started at ages 12–15 and included seven detailed stages: financial aspects of transitioning, community and legal supports, readiness for transition, risk factors, diagnosis, possible obstacles, and discharge from healthcare (Andrade et al., 2017).

Critical Care Services Ontario (CCSO), comprised of a multidisciplinary team of senior clinical and administrative leaders, implemented an Ontario Critical Care Plan from 2018 to 2021 to address and identify priorities for improving patient and family care (Critical Care Services Ontario, 2018). While receiving support from the Epilepsy Implementation Task Force, the CCSO developed a Comprehensive Epilepsy Program to improve the quality of care in areas such as data-informed improvement, enhanced systems of care for optimal and contiguous progress, and clinicians' skills (Critical Care Services Ontario, 2018). The literature critically supports a collaborative approach for treating chronic conditions.

Transition Care Gap

Despite significant evidence for the need of transition programs (Baca et al., 2018; Camfield et al., 2017; Chappell & Smithson, 1998; Gray et al., 2017; McManus et al., 2013; Reger et al., 2018), programs are often only temporary (e.g., two years), and two of the three transition programs discovered during the course of this review are no longer running. For example, in response to the Ontario Epilepsy Strategy that attempted to make care centres accessible provincewide, the Hospital for Sick Children started a program called Good2Go which provided general information about transitioning and ensured that epileptologists, and paediatric and adult healthcare members, were all involved (Epilepsy Ontario, 2011); Health Quality Ontario started bestPATH, which aimed to improve health outcomes by establishing a smooth transition between areas of care with the main objective to minimize worsening of symptoms, to better coordinate care, and to improve quality of life (Health Quality Ontario, 2012). These are no longer running. BC Children's Hospital created ON TRAC for youth with chronic conditions or disabilities and provides clinical support, individualized transition care planning, and confirmation of transfer to adult care providers (2020). It was extremely difficult to find information about current transition care programs despite multiple initiatives for improved specialized healthcare (e.g., bestPath, Canada's Primary Health Care Transition Fund, a transition working group by the Ministry of Health and Long-Term Care in Ontario, and Critical Care Services Ontario - Ontario Critical Care Plan). Importantly, all parents should be aware of the changes in healthcare models and challenges that may affect a smooth transition, and there should be improved access to and awareness of transitioning care resources because parents are uninformed about the existence of these programs.

Knowledge of Condition

Critical components in a successful transition are knowledge of the condition and information resources about the condition. As reported by the National Survey of Children's Health, only 15% of youth received assistance from their healthcare professionals when transitioning from pediatric to adult healthcare (Crawford, 2018). Parents are not provided with knowledge of a transitioning process, and youth that are transitioning are unprepared. McManus et al. (2013) investigated aspects of transitioning in youth with special healthcare needs and concluded that only 44% of parents reported discussing transitioning with an adult care provider despite 59% who reported discussing other changing healthcare needs, and 78% of parents acknowledged the increased responsibility the youth now has in treatment maintenance. Gray et al. (2017) demonstrated that knowledge of the condition improved throughout the transition process for youth with a transition plan, but decreased for the parent/caregiver, and anxiety was lower in the group that experienced a transition plan. Moreover, while their study shows positive effects of transition programs on children's well-being, it also highlights that parents are not kept informed.

Cooley et al. (2011) provide a detailed clinical report about transitioning from adolescence to adulthood, which connects the necessity of an appropriate transition from pediatric healthcare to adult healthcare to physician education that emphasizes patient and family-centred models and guidelines of transition care. The report describes the need for uninterrupted and developmentally appropriate healthcare services during transition, which impacts transition policies, and includes reviewing the transition plan throughout development and implementing an adult care model (Cooley et al., 2011).

Six overarching themes discovered in this review for effective transition programs include: a collaborative approach that emphasizes a multidisciplinary team consisting of family members, physicians, nurses, and care coordinators; specialized healthcare providers; knowledge of the condition from the individual and family perspective; ongoing training of healthcare providers; individuals having access to resources such as services and information about transitioning; and having a comprehensive, individualized treatment plan that is monitored by the multidisciplinary healthcare team. All members of the multidisciplinary healthcare team, including parents, must be involved in the transition process. A pediatric transition package should accompany the transitioning patient to the new adult physician. Patient and family education is integral to the approach, as is the requirement of the medical professionals and family members to consider the risk factors and psychosocial factors that might affect successful transitioning. A Community of Practice (CoP) established by The Canadian Association of Paediatric Health Care Centres provided *A Guideline for Transition from Paediatric to Adult Health Care Needs: A National Approach* that included 19 recommendations to facilitate a smooth transition through adolescence into adulthood (CAPHC, 2016). These emphasize personal choice, a family-centred approach, and ensuring inclusion of all facets of a youth's life in understanding transitioning while recommending individualized planning, education on the patient's condition, collaboration of healthcare teams, involvement in pediatric and primary providers, and comprehensive monitoring during transition. At the system level the recommendations include developing written policies, educating and accrediting organizations, and involving youth and families in the process.

The age for transitioning from pediatric to primary adult healthcare coincides with brain and behavioural developments required for independent functioning and the transition period is complex and stressful for the individual, family, and caregivers (CAPHC, 2016). Youth with special care needs are at higher risk for difficulties such as EF deficits, social functioning risks, depression, suicidal ideation, and engaging in risky behaviours requiring different adult care than an individual without special care needs. A transition program should be individualized specifically for the youth because every epilepsy diagnosis is unique, development rates vary, and every individual has different needs to prioritize. Adolescents without developmental disabilities will need a different plan than individuals with many or significant disabilities.

There is limited literature looking at the effectiveness of transition program outcomes (Camfield et al., 2019; Nabbout et al., 2019). Research showed transition programs help lower anxiety and improve self-esteem (Gray et al., 2017). However, awareness of transition programs is limited, parents do not know where to turn for resources, physicians are ineffective at coordinating and collaborating during transition, and transition programs can be costly. Despite literature supporting transition programs (Gray et al., 2017), only around 15% of families learn about them (Baca et al., 2018).

CONCLUSIONS

Epilepsy affects a significant number of people worldwide. Children with epilepsy are at higher risk for depression (Davies et al., 2003; Zhao et al., 2012), social challenges, and impaired EF (Parrish et al., 2007; Sherman et al., 2006). Emphasizing HRQOL is important when addressing challenges relating to transitioning with epilepsy such as AED use, surgery outcomes, treatment plans, and seizure control. Since epilepsy is often lifelong, unique, multi-faceted, and frequently associated with comorbidities, it is difficult for many youth to take responsibility for medication compliance and monitoring their condition. To date in Canada, there are few transition programs longer than two years, and parents are not being informed about them. Previous literature shows rates of epilepsy are highest in childhood (Kotsopoulos et al., 2002); knowledge and treatment methods have a profound effect on quality of life (Gray et al., 2017); children with epilepsy have increased risk for developmental and psychological challenges; and despite support from literature for specialized transition programs, parents aren't informed about transition programs.

Future research needs to explore treatment outcomes for children with epilepsy to determine the best ways to implement transition programs and focus on EF and adaptive function as a predictor of HRQOL. More programs need to be implemented to ensure accessibility to all individuals, and physicians should engage families in transition discussions. More research about drug resistant epilepsy, alternative treatment methods, and seizure control is needed in addition to general research about epilepsy. Lastly, investigating social challenges and outcomes in children with epilepsy might help improve transition programs.

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HANNAH SANTILLI

Redesign the Ill-Defined

Autism Spectrum Disorder and the implications of low socioeconomic status

Should Autism Spectrum Disorder (ASD) be considered a disability? To analyze the term disability, this paper applied a meta-analysis research approach to examine the contrasting views in disability literature. An extensive literature search and review compared the two perspectives of the term disability *(i.e., the social model and the medical model) and furthermore highlighted the relationship between an individual's social barriers and their socioeconomic status (SES) by demonstrating the experience of individuals with ASD living in economically disadvantaged communities. Results determined that individuals with ASD who live in low socioeconomic communities were unable to access effective resources due to social barriers such as stress, stigma, income, and financial aid, which resulted in a disability. In addition, the presented research outcomes have confirmed the importance of social change through ASD advocacy and self-education.*

Keywords: Autism Spectrum Disorder (ASD), socioeconomic status (SES), medical model of disability, social model of disability, ableism, disability

INTRODUCTION

I was in the first grade when I met Christian I was intrigued by his wit and intellect; he was able to tell time on an analogue clock faster than anyone in the classroom. Something was unique about Christian—he had (what seemed to be) his own teacher named Angie who would assist him during class time. Angie made special accommodations for Christian, but at age six, I was unable to understand why. Being the sensitive individual that I am, I built up the courage to respectfully ask Angie why Christian needed her help, and she replied "Christian has autism, and it is easier for him to do class work if I help him." Angie's response was fascinating, and I was determined to educate myself about autism and how it had affected Christian. Later that day, I stayed in for recess to understand Christian's "atypical" behaviours, I helped him with his schoolwork, and even invited him to my upcoming seventh birthday party. As our friendship developed, I became so much more impressed with

Christian as he continued to demonstrate exceptional abilities. I was frightened at the thought of knowing that Christian might be overlooked by others because of his unusual behaviours and social challenges. I was afraid that no one would understand Christian like I did; none of my other classmates cared to take the time to acknowledge his capabilities, mainly because, as I now know, his capabilities were concealed by the attributes of traditional education environments. My one-to-one efforts with Christian enabled me to look beyond his surrounding barriers and recognize his potential. Seventeen years ago, I made an implicit promise to Christian that I would continue to advocate for vulnerable populations through the provision of disability research and solutions to barrier-free design. Thus, the significant role that Christian played in my childhood led me to the topic of my article.

Autism Spectrum Disorder (ASD) is a developmental disorder which challenges an individual's social skills, communication, and behaviour (Perry et al., 2013). Challenges of ASD include, but are not limited to, lack of conversational abilities, trouble making eye contact, and sensitivity to various stimuli (Perry et al., 2013). These challenges can range from mild to severe, which in turn create a spectrum of disorders—low functioning refers to severe challenges and high functioning refers to mild challenges (Perry et al., 2013). Most definitions of ASD include the term "disability" to explain such social, communication, and behavioural challenges. For example, a brief definition of ASD provided by Centers for Disease Control and Prevention (CDC) states that "autism spectrum disorder (ASD) is a developmental *disability* [emphasis added]" (CDC, 2020).

In this article, I will argue that the presumed disability of ASD is not the result of a biological disfunction, but rather the result of the stigma created by the term "disability" itself, and by the broader societal barriers that individuals with ASD face (Walker, 1993)—especially when they are also constrained by low socioeconomic status. Socioeconomic status (SES) is quantified by an individual's income, education, and occupation (Chen et al., 2018). For example, low SES suggests low income, low education, and occupations requiring limited to no education, typified by low pay, and sometimes involving laborious working conditions (Chen et al., 2018). When individuals with ASD must also struggle with low SES, the barriers they face in everyday life only become more severe. Hence, this article seeks to examine if low SES contributes to the social and/or physical implications of the term "disability" by analyzing the challenges that an individual with ASD may experience—do the so-called disabilities or challenges associated with ASD result from one's environment? If so, are these barriers exacerbated by SES? I argue that most of the disabilities or challenges associated with ASD are due to social barriers that surround an individual; these barriers are thus exacerbated in low SES communities.

The article is divided into three sections. The first section introduces the social model of disability and contrasts it with an alternative, medical model. The second section draws on the social model of disability to show how socioeconomic factors add to the barriers faced by individuals with ASD. The third section introduces a redefined notion of disability by proposing three theoretical interventions and steps to catalyze change.

MODELS OF DISABILITY

To understand why the term "disability" exists, we must understand how it is discussed in existing literature. There are many ways of conceptualizing disability, but here I will focus on two main models: the medical model of disability and the social model of disability (Berghs et al., 2016). I will use deafness as an example to distinguish the contrasting views of each model.

Consider the medical model as a standard medical approach to medicine—this model defines disabilities as a problem that exists within a person's body (Goering, 2015). The medical model would argue that a deaf individual has a "deficiency" that prevents them from successfully participating in "normal" social interactions (Power, 2005); from this perspective, this person would require additional treatment or care to "fix the problem," such as a hearing aid or cochlear implants (Goering, 2015; Power, 2005). In short, the medical model suggests that an individual with a disability requires medical intervention such as medication, technological supplementation or replacement, or physical rehabilitation to mitigate the existing disability (Goering, 2015; Power, 2005).

In contrast to this view, the social model distinguishes *impairments* from *disabilities* (Berghs et al., 2016). That is, the social model conceptualizes an impairment as a "lacking mechanism of the body," while a disability is a "disadvantage or restriction of activity" (Oliver, 1996). In short, the social model argues that an individual faces debilitating challenges because external obstacles limit the capacity of their impairment (Oliver, 1996). The social model highlights the distinction between impairment and disability, which in turn separates the association between an individual's cognitive, behavioural, or physical condition and their capabilities. Therefore, it is important to understand the social model as a disconnection, dissociating an individual's impairment from their capabilities. If a deaf or hard-of-hearing individual is labelled as disabled, their potential is often overlooked due to the negative connotation of the term "disability." Disentangling the association of the impairment with a disability would diminish the social oppression that one experiences because of their impairment; therefore, it is important to adopt the social model for analysis within any social context.[1]

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[1] The example of deafness used to highlight the distinction between the medical and social models of disability was chosen because of the high level of social segregation between members of the Deaf community and mainstream (hearing) society, and the widely held view that hearing technology can serve as a "remedy" for many hearing impairments. That said, as outlined in Bauman and Murray (2017), contemporary perspectives in the field of disability

Many researchers and advocates are committed to the social model, and mainly to the idea that society is responsible for the concept of disability (Berghs et al., 2016). According to the Union of the Physically Impaired Against Segregation, a disability is imposed on top of the already existing impairment because associated stigmas unnecessarily isolate and exclude full participation in society (Lott, 2017). A disability is then a presumed inability effected by the social oppression yielded by restrictive barriers and exclusion from societal participation (Oliver & Barnes, 2012). For example, a disability study published by the U.S.-based National Academies of Sciences, Engineering, and Medicine presented data suggesting that the cultural norms that are created within a society severely affect the physical and social environments of an individual with a labelled disability (Brandt & Pope, 1997). More specifically, they explain these cultural norms as a way in which society has constructed environments due to their experience. In short, they suggest that if 78% of the population experiences life in a particular way, any relation between a person and their environment that differs from this will be considered abnormal (Morris et al., 2018).

ASD AND SOCIOECONOMIC STATUS

With the social model of disability in hand, we are now able to see how it also applies in the context of ASD. For example, an impairment to the social model is like the neurodiversity of brain development in individuals with ASD: it is a variable that cannot be changed (Goering, 2015). However, a disability to the social model would be the inaccessibility to resources necessary for rehabilitation and support (i.e., therapy sessions, individualized learning programs, and funded community supports); this is a variable that *can* be changed (Berghs et al., 2016). If an individual with ASD experiences challenges with independent learning or task completion, the inability to complete the required assignment becomes a disability (Matthews, 2009). Yet, if that individual were provided accommodations, such as one-to-one learning styles, smaller class sizes, or an extension in allotted time, the disability would then be eliminated (Matthews, 2009). In essence, the social model underlines the importance of resource allocation and a barrier-free design to support individuals with ASD (Berghs et al., 2016; Goering, 2015; Matthews, 2009).

Barriers that negatively impact individuals with ASD are strongly impacted by socioeconomic factors, which function as another kind of social barrier. Social barriers are defined as restrictions that relate to the social determinants of an

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studies generally position deafness outside of the realm of disability, “reframing representations of deafness from sensory lack to a form of sensory and cognitive diversity that offers vital contributions to human diversity.” The notion of *Deaf-gain* has been posited in opposition to the impairment-minded concept of *hearing loss*, placing “Deaf communities and their languages within the framework of biocultural diversity” and focusing on the extrinsic value of Deaf communities and their signed languages to understand “the plenitude of human being” (Bauman & Murray, 2017).

individual's health (Berghs et al., 2016). Some examples of social determinants include income and social status, personal health practices and coping skills, as well as employment and working conditions (Simcoe Muskoka, n.d.). Financial status and stress among individuals with ASD are inevitably worsened in low SES communities simply because they are less likely to be employed (CDC, 2020). In 2017, 35.5% of individuals with a legal disability were employed throughout the United States, while 76.5% of people without legal disabilities were employed (CDC, 2020). That makes the rate of employment of those without a legal disability double that of individuals with a legal disability (CDC, 2020). Burchardt's (2004) research seeks to emphasize that social barriers and individual limitations hinder the autonomy, value of freedom, and earnings among individuals with ASD, variables that the researcher uses as a measure of one's well-being. Burchardt argues that when the social determinants of health of any given person are essentially decreasing because their disabilities are limiting their capacity, their basic human rights are being cheated. She argues that this is unfair and ethically irresponsible of society. That is, social barriers limit human rights because with a lowered SES, an individual is unable to overcome the exclusion caused by the lack of resources.

According to Statistics Canada (2006), parents of children with ASD experience financial disadvantages. Due to the lack of appropriate public care supports, they must often change or reduce their work hours, for they must care for their children more actively. The additional demands that come with having a child with ASD cause increased stress levels, which could ultimately lead to an upturn in developing health problems (Statistics Canada, 2016). What's more, if these children are not getting the appropriate care that they require to be cognitively stimulated and progress, further repercussions could develop (Hoefman, et al., 2014). These demands cause worsening health effects, which lead to an inequitable balance of social determinants, ultimately creating a disability within a social environment (Hoefman et al., 2014). Moreover, those who have children with ASD report higher levels of parental stress compared to parents of children with other developmental impairments (Perry et al., 2013). That is, because cognitively impaired children require extra care, ASD correlates with higher levels of parental stress (Perry et al., 2013). Let's revisit Christian and Angie for example. Christian required Angie's assistance within and beyond the classroom, for not only was Angie's assistance required for Christian's math lessons, but Christian used Angie's support during lunch period. Without Angie's support, Christian would have been unable complete activities independently, establishing a need for extra assistance and supplementary care. The lack of extra assistance and care could ultimately hinder the growth and progression of children with ASD and increase the incapacities of a disability by disallowing children to complete most tasks successfully and effectively (Perry et al., 2013). Therefore, removing social barriers such as income and stress levels would diminish limitations, refine societal inequities, and improve the well-being and progression of children with ASD (Statistics Canada, 2006; Hoefman et al., 2014; Perry et al., 2013).

While low SES and stress go hand in hand, it is important to consider that individuals with ASD living in low SES communities experience additional stressors resulting from physical barriers, such as environmental challenges including accessibility and funded initiatives, which can limit their growth and progression.

Physical barriers are defined as structural obstacles in surrounding environments that prevent or block mobility and access (CDC, 2020). Some examples of physical barriers include lack of transportation, resources, and appropriate treatment (CDC, 2020). If we look at the issue of transportation (i.e., cars and public transit), a study conducted by Pendall et al. (2020) shows that individuals who live in low SES communities are less likely to afford a car; this study also shows that automobiles have a positive effect on accessibility to higher paying jobs. Moreover, we must consider how transportation influences accessibility. With a lower SES, transportation is limited because it is likely that an individual living in a lower SES community cannot afford a car. If this individual has a child with ASD who relies on transportation to access necessary healthcare, accessibility will be limited, which therefore creates disabling challenges within the environment. The lack of fundamental necessities such as healthcare, school, and work become a physical barrier, which then creates a disability (Pendall et al., 2020).

PUTTING THE SOCIAL MODEL OF ASD INTO PRACTICE

There are three steps necessary to catalyze effective change: (1) change the way *you* think; (2) advocate for change; and (3) revise enacting policies.

The social model of disability helps us to recognize how society is responsible for the misuse of the term "disability." If disabilities are socially constructed, then they can be socially dismantled. This notion follows from the idea of norm change, a concept which suggests that moral discussion, or "moral talk," operates as a tool to change social norms. According to Westra (2021), norm change can alter society's expectations, which in turn motivates the adoption of new, positive social norms. To deconstruct existing social norms, Westra argues that norm change must convey information about morality in a way that illustrates how people ought to think and act. That is, this change must challenge social norms by endorsing a normative standard about the accepted and unaccepted kinds of behaviour. For example, after reading this paper, you may (or may not) endorse my normative standard about how we should be conceptualizing ASD. Thereafter, you may choose to disseminate this information by telling your peers, educating yourself through various forms of media, or by simply changing your perception on disability literature. As a result, we form an alliance, and become a group of influential norm changers who can surely dismantled the existing social conceptions of ASD. A small adjustment to your belief goes a long way, especially if that small adjustment challenges social norms. In short, this change starts with *you*. To efficiently modify existing social constructs, we must challenge social norms, and provide clear, concise, and educational information concerning the benefits of the social model. Moreover, we must provide objective insight to disability literature by discerning the ideas of impairment verses disability by highlighting the existence of social restrictions in surrounding environments, mainly in low SES communities. By changing social norms through the act of moral discussion, we can effectively eliminate the barrier of discrimination by challenging normative reason and behaviours, which will ultimately diffuse the social barriers that separate ASD from success (Westra, 2021).

To paint a clearer picture, let's imagine that we are all influential norm changers who have successfully identified the stigmatizing misconceptions of ASD, but are now looking for the solutions to eliminate barriers. The second necessary step towards modifying existing practices is advocating for change. Advocacy is the "act or process of supporting a cause or a proposal" (Miller et al., 2018). Studies show that formulating a strategic plan is crucial for efficient advocacy (Miller et al., 2018). That is, we must provide tactical practices that will encourage adjustment to social barriers. For example, similar studies have demonstrated the effectiveness of educational campaigns that target human rights activism (Aaron, 2020). An example of such educational campaign is the Autistic Self Advocacy Network (ASAN, 2021). This non-profit organization is run by/for individuals with ASD. Their main objective is to advocate for inclusion in decision-making policies regarding legislation, depiction in the media, and disability services (ASAN, 2021). For example, one of the more monumental initiatives that the ASAN has participated in is the modification in ethical, legal, and social policies concerning ASD research. With the help of Harvard Law School, ASAN put forth a framework that implemented two policies discussing DSM-5 criteria and the impact of proposed changes. These policies addressed the concerns of autism research, such as participation in research methods, intervention goals, and effectiveness, and balanced these concerns with a modified research guideline. Therefore, ASAN was able to effectively modify the existing policies regarding ASD research because of continued support and advocacy. Consequently, by participating in initiatives such as ASAN, we can advocate for change by allowing vulnerable, marginalized groups to be heard.

The most difficult step towards modifying existing practices includes the revision of enacting policies. Existing evidence suggests that practitioners must adopt a revised notion of disability to support the needs of individuals with ASD living in low SES communities. If most life experiences among a society are conceptualized within the parameters of a particular social norm, then any idea or behaviour outside of this social limit will be considered unordinary or atypical. (Morris et al., 2018). Yet, perhaps the reconceptualized understanding of ASD will encourage our societal parameters to extend and include a model of disability that reforms social norms, advocates for change, and refines policies that adhere closely to the social model

(Morris et al., 2018). In addition, researchers and educational campaigns such as ASAN should be directing their data towards provincial governments to implement ethical strategies that will benefit marginalized groups. It will be difficult, but these necessary modifications will provide life-changing experiences to individuals with ASD, as they undoubtedly deserve.

CONCLUSION

Christian and Angie illustrated the importance of resources, equity, and opportunity by highlighting the advantages and barriers to Christian's environment. The story of Christian and Angie gave insight to the subjective reality of individual barriers and initiated discussion regarding the adoption of the social model into disability literature and the encouragement of social change. This study concludes that most of the challenges associated with ASD are a direct result of the social barriers that surround that individual and are therefore exacerbated in low SES communities. The examples provided in this article have *shown* that the "disability" of ASD is socially constructed. This article has established many ways in which society can deliver the necessary resources through change, advocacy, and education. If we challenge social norms, advocate for change, and participate in educational campaigns, we can redesign the ill-defined notion of ASD by removing the restricting walls of limited growth and welfare.

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ALEXANDRA MARKWELL, DANIKA WAGNER, ANDREJA STAJDUHAR, & LUCAS NORTON

Are Extraverts More Likely to Compete in a Funny Competition?

An exploration of extraversion, competitiveness, and humour

Personality factors, like extraversion and competitiveness, have been shown to significantly advantage individuals in the workplace. Indeed, trait extraversion has been linked to success securing jobs and overall job performance, while competitiveness has been shown to impact career choices. However, it is not well understood how these two factors may interact to affect success in the workplace. Thus, this study sought to explore the domain specificity of extraversion by examining whether it predicts competitiveness in the domain of humour. A convenience sample of participants (N = 95) were recruited to participate in an online study through Qualtrics' survey platform. The International Personality Item Pool Big Five Marker measure of the Big Five personality traits was used to assess personality traits. Participants chose to compete in one of two fictitious competitions—a funny story competition or a tournament counting game. For both competitions, the winner received (imaginary) financial gain. The results revealed no significant relationship between extraversion and competitiveness in the domain of humour. However, this study did reveal that gender predicted general competitiveness but not competitiveness in the domain of humour. These findings contribute to the established literature on gender differences in competitiveness.

Keywords: Personality, competitiveness, extraversion, humour, domain specificity

Individual differences in personality and competitiveness contribute to individuals' distinct decisions in their everyday life. Competitive tendencies are defined as the desire to compete with others and win, and these tendencies persist across time and situations (Elliot et al., 2018). A drive to win, or lack thereof, has been shown to impact career choices (Buser et al., 2014; Elliot et al., 2018; Neiderle & Versterlund, 2007, 2011). Similarly, other individual factors like personality traits have been shown to have an important role in career and workplace choices (Penn & Lent, 2019). One such trait is extraversion, defined as an individual being sociable, assertive, talkative, and active (Sackett & Walmsley, 2014). Similar to competitive tendencies, extraversion has been positively associated with job-related outcomes (Sackett & Walmsley, 2014). Indeed, personality and competitiveness are frequently studied in social, industrial, and organizational psychology, due to their influence on employment outcomes. However, the ways in which personality traits, like extraversion, interact with competitive tendencies are not well understood. It may be that extraversion and competitiveness interact in a domain-specific way. Thus, the present study sought to elucidate the relationship between competitiveness and extraversion by applying them to a domain that has yet to be explored—humour. More specifically, the current study investigated whether extraverts were more competitive in the domain of humour, as it is a domain in which they may thrive (Deaner & McConatha, 1993). By examining competitive behaviour and personality in such a way, the present study seeks to understand the relationship between extraversion and competitive tendencies.

COMPETITIVE BEHAVIOUR AND EXTRAVERSION IN THE WORKPLACE

Competitive behaviour can be a driving force in an individual's life. According to social comparison theory, competitive behaviour functions as a method of social comparison; individuals are motivated to compete with others to affirm their own competencies, a behaviour consistent with Western cultural norms (Fletcher et al., 2008). Competitive tendencies have been shown to influence goal pursuit, which can translate to the economic and social success of an individual (Fletcher et al., 2008). A person's competitive drive can impact their career choices and their willingness to persist in the attainment of workplace rewards, such as additional benefits or promotions. Indeed, competitiveness has been correlated with more prestigious academic achievement and career paths (Buser et al., 2014).

Much like competitiveness, personality traits influence daily interactions and can also play a significant role in career and workplace decisions. Previous research has found extraversion to be directly related to self-efficacy in the workplace, that is, higher levels of extraversion results in less decisional discomfort and greater self-efficacy (Penn & Lent, 2018). Further, greater feelings of self-efficacy may translate to better affective and cognitive tendencies when interpreting past decisions, which may foster a more positive outlook on decisional challenges (Penn & Lent, 2018). This finding suggests that extraverts may be better suited to take on additional challenges in the future, which may increase their likelihood of workplace success. Extraversion has also been found to be positively correlated with overall job and task performance, salary level, and promotions (Sackett & Walmsley, 2014; Seibert & Kraimer, 2001).

Despite the significant influence of both extraversion and competitiveness on workplace outcomes, there is limited research examining the relationship between both variables. A previous study conducted by Bartling et al. (2009) found that extraversion was not significantly related to competitiveness. Instead, the researchers found that participants scoring high on trait agreeableness were less likely to compete. However, beyond this study, the interaction between the two variables has not yet been explored. Therefore, novel investigations are needed to examine if and how extraversion and competitiveness interact. One method of bridging this gap in the literature is to explore the relationship between extraversion and competitiveness in a domain-specific way (i.e., examine the two variables of interest in a certain domain).

THE DOMAIN OF HUMOUR

Previous research investigating competitiveness has focused on competitiveness as measured "generally," usually meaning in terms of economic gain (Niederle & Vesterlund, 2007). This measure is significant, given the breadth of the literature on workplace success, which is closely tied to economic output. However, it may be the case that individuals are competitive in different ways, such as in the domain of humour. In the workplace, humour has been shown to play an important role in developing relationships, building rapport, and promoting culture, all of which are also facilitated by the social skills of extraverts (Holmes, 2000; Holmes & Marra, 2002; Petraki & Ramayanti, 2018). Given that the relationship between extraversion and competitiveness in the domain of humour has not been previously investigated, this study may offer novel insight into the association between extraversion and competitive behaviour.

STUDY CONTEXT

Past studies have shown that extraversion is positively correlated with humour (Deaner & McConatha, 1993). Given this positive association, it follows that humour may be a domain in which extraverts thrive. In line with this assumption, examining competitiveness in the domain of humour may offer insight into how variations in trait extraversion are related to differences in competitive behaviour. This raises the question: if extraversion is associated with competitiveness, do extraverts tend to excel in the domain of humour? The present study sought to address this question by investigating extraversion and competitive tendencies in the domain of humour. The researchers hypothesize that higher extraversion scores, as measured with the International Personality Item Pool Big Five Marker measure of the Big Five personality traits (Topolewska et al., 2014), will predict participants' willingness to compete in a humorous competition.

Gender has been shown to be a predictor of competitive behaviour, primarily in intersex competitions. Previous research has shown that females choose to compete less frequently than males and that this tendency may translate to worse job-related outcomes (Neiderle & Versterlund, 2007). A study conducted by Buser et al. (2014)

found that females are less likely to compete, and consequently less likely to pursue prestigious careers and academic paths. Conversely, previous studies have identified that females are just as likely to compete as males in specific competitive environments, such as in female-only environments (Frick & Moser, 2021; Neiderle & Versterlund, 2007, 2011). The results of these studies often conclude that the socialization of males and females and their competitive environments play a significant role in the differentiated gender outcomes within competitions. Therefore, when examining the domain-specificity of competitiveness, it is essential to investigate gender. Indeed, in recognizing the importance of sex and gender-based analyses, the Canadian Institute of Health Research (n.d.) now requires the exploration of sex and gender within its funded research. Given the importance of sex and gender-based analyses, the current study conducted an exploratory analysis of gender as a predictor of competitive behaviour.

RESEARCH DESIGN AND METHODS

Participants

Data from 132 participants were collected via a convenience sample and the data of 33 participants were excluded due to incomplete surveys. Gender was examined within the scope of the gender binary (i.e., male and female), thus, four participants were excluded for reporting a gender other than male or female. The final sample size was 95 participants (63 females, 32 males). The majority of the respondents were Canadian residents, with a mean age of 32.4 years old.

Prior to completing the experiment, all participants were informed that their participation is voluntary and they had the right to stop participating at any time. Participants were also made aware of the minimal risks of participating in the study. All procedures were approved by York University's Office of Research Ethics.

Definitions and Materials

Personality

Personality was measured using the short International Personality Item Pool Big Five Markers (IPIP-BFM-20) questionnaire for measuring the personality traits: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Topolewska et al., 2014). Participants were shown 20 statements and were asked to rate how accurately the statements described them on a five-point scale from one (very inaccurate) to five (very accurate). Therefore, any participant's highest score on a given personality measure was 20, and the lowest possible score was five. The order of presentation for the items was random to reduce ordering effects.

Competitiveness in Humour

Competitiveness in the domain of humour is defined by choosing to enter the humorous competition. Participants were asked to write a short funny personal story or joke and then choose whether to submit their story/joke to an anonymous funny story competition (humorous competition) or not.

Competitiveness

Competitiveness is defined by choosing to enter the tournament of a counting game, using a measure similar to a method introduced by Niederle and Vesterlund (2007). In this game, participants were shown a table of zeros and ones (see Figure 1) and they were asked to count the number of zeros displayed in the table in exchange for an imaginary monetary compensation ($1.00) for each table counted correctly. After some practice trials, participants were asked whether they would like to enter the tournament. In the tournament, participants were asked to imagine earning a larger sum for each table answered correctly ($1.50), so long as they count more tables correctly than an imaginary randomly selected participant, otherwise they would receive nothing. Participants who did not enter the tournament were told to imagine continuing to receive the original piecemeal rate for each table answered correctly.

Figure 1. Sample Counting Game Table

0	0	1	1	1	1	1	0	0	0
1	0	1	1	0	0	1	0	1	1
0	0	0	1	1	0	1	1	1	0

Please enter the number of zeros in the table:

Procedure

All participants completed an online survey using Qualtrics. Participants were randomly sorted into one of two counterbalancing conditions—participants participated in the competitiveness in humour measure first or the counting game. Counterbalancing was used to help minimize the effects of fatigue. After participants completed one competitive measure, they then completed the other competitive measure. Upon completing both competitive measures, participants completed the short IPIP-BFM-20 questionnaire and answered questions about age and gender.

RESULTS

The researchers conducted a binary logistic regression analysis, which is a statistical analysis that estimates the relationship between a binary independent variable and one or more independent variables. This analysis was chosen because the dependent variable (competitiveness in humour) is binary, while the independent variable, extraversion, was not. This analysis was conducted at an alpha level of 0.05 to determine if extraversion predicts competitiveness in the domain of humour. The results showed no significant association between extraversion and competitiveness, χ^2 (85, *N* = 95) = 113.91, *ns*, indicating there was no difference in the mean extraversion score for those who participated (*M* = 12.57, *SD* = 4.17) and did not participate (*M* = 11.78, *SD* = 3.28). Thus, the researchers fail to reject the null hypothesis that extraversion predicts competitiveness in the domain of humour.

Exploratory analyses were conducted to assess the data collected. A binary logistic regression analysis was once again conducted since competitiveness is a binary variable. This revealed that competitiveness, as measured by the counting game, predicted competitiveness in the domain of humour, χ^2(85, *N* = 95) = 113.82, *p* = .013, R^2 = 13.5%, suggesting that a general competitive tendency was measured with the humorous competition task.

Additionally, a binary logistic regression, used for reasons stated above, found that gender predicted competitive behaviour in the counting game, but not in the humorous competitive measure, χ^2(93, N = 95) = 87.71, *p* = .034, R^2 = 4.9%. While 31.25% of men chose to compete in the counting game, only 12.70% of women chose the same. This finding partially replicates previous research on gender and competitiveness, showing that women are less likely to compete than men (Niederle & Vesterlund, 2007). Finally, the association between personality traits and competitiveness was examined in exploratory analyses, but no significant results were found. Unlike Bartling et al. (2009), no significant association between competitiveness and agreeableness was found.

DISCUSSION

The purpose of this study was to investigate the relationship between competitiveness, humour, and extraversion. The study used two competitive measures to examine competitiveness generally and competitiveness in the domain of humour to determine if extraversion predicted willingness to compete in either task. Considering that previous studies have failed to find a link between extraversion and competitiveness, the current study sought to explore whether personality traits may only drive effects in domain-specific ways. Therefore, this would offer a more detailed understanding of how extraversion and competitiveness may interact. Despite this, the present study did not find any significant associations between extraversion and competitiveness, not in general or with humorous competition. Although extraversion may not be a relevant personality trait for predicting competitive behaviour, it remains essential in career choices and workplace behaviour.

Competitiveness in the counting game predicted competitiveness in the domain of humour. This indicates that a competitive tendency was successfully measured. Although general competitiveness predicted competitiveness in the domain of humour, there were several participants who chose to compete in the humorous competition and not in the counting game, suggesting that there may be domain specificity for competitiveness. This finding builds on the literature which has found that different measures of competitiveness and different rewards for competing can yield varying results (Niederle & Vesterlund, 2007, 2011). Still, this area requires future research to understand competitive behaviour in other unexplored domains.

Given the null results, post hoc analyses were conducted to examine if gender influenced competitiveness generally or in a domain-specific way. The results showed that gender predicted competitiveness in the counting game but not in the humorous competition. This finding suggests that there may be domain-specific elements of competitive behaviour that are influenced by gender. Additionally, gender did not predict competitiveness in the domain of humour, suggesting that gender may not predict all competitive behaviour, and this null result may explain differences in career decisions and workplace behaviour. Previous research has found that differing conditions for competing, such as receiving different compensation or sex-segregated competitions, have resulted in no difference between the males and females in terms of competitive tendencies (Niederle & Vesterlund, 2007, 2011). Further, past research has highlighted the importance of promoting environments where females feel comfortable competing (Niederle & Vesterlund, 2011). Future research should aim to discover the ways in which women can be supported to feel comfortable enough to compete. In the present study, participation in the humorous competition was anonymous. It is unclear whether anonymity functioned as a motivator for women to compete, however, this highlights an area for further exploration. Future research should explore whether anonymity in competitive workplace processes (e.g., promotions) encourages women to compete.

LIMITATIONS

The present study has several limitations. First, this study was conducted online, and therefore, effortful participation could not be directly observed. That is, some participants may not have given honest responses or remained focused on the experiment as they would in an in-lab experiment. When examining the role of extraversion, this effect may be pronounced, given that online experiments do not offer the same social environment as in-lab experiments. Additionally, since most of the participants were drawn from a convenience sample from the researchers' personal lives, participants may not have taken the tasks seriously. Further, given the convenience sample, some participants may have behaved in accordance with what they believe would assist the researchers' desired results. Moreover, the convenience sample, as opposed to a random sample, limits the generalizability of the findings. A more robust study using a random sample of the population is needed to validate the present findings.

Finally, this study had a female-biased sample, with twice as many female participants as male participants, possibly influencing the results. In light of this bias, some exploratory analyses controlled for gender, however, most results were insignificant. Therefore, a follow-up study with a balanced sample would improve the generalizability of these findings and may yield different and potentially significant results.

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Résumés (2021)

Ces résumés accompagnent les affiches qui ont été présentées lors de la neuvième foire annuelle de recherche pluridisciplinaire des étudiants de premier cycle de l'Université York (Toronto, Canada), qui a eu lieu en mars 2021. Pour voir les affiches, veuillez cliquer sur « Poster PDF » sous le titre du résumé dans la section « Résumés & affiches » du site web de la Revue YOUR Review *:*

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SUREYA ALI

Rafael Correa's Failed Vision of Development Prosperity

In 2007, a new progressive government led by Rafael Correa was elected to power in Ecuador. The presidency of Correa had constituted debates coming from social movement groups arguing against the extraction of natural resources. The exploitation of natural resources in the Amazon region became a large component in Correa's administration (Riofrancos, 2020, p. 5). The idea to extract resources such as oil was viewed as a way to eradicate poverty and inequality. Correa justified resource extractions as means to generate state revenues for economic prosperity (Becker 2013, p. 54). The intensive form of extraction of resources was framed as the extractive development model. On the other hand, social movement groups, specifically Indigenous movement groups have argued against the extractive development model. The resistance against extractivism is generated from years of protest against neoliberal practices promoting the exploitation of natural resources (Riofrancos, 2020, p. 5). The fundamental purpose of this research is to examine how Correa's extractive development model failed to generate development for Ecuador. Additionally, the research identifies conflicts over land rights and the contradiction of the Constitution violating the rights of Indigenous territories. Through an analytical examination of scholarly articles, this research demonstrates that resource extraction has resulted in environmental consequences. The research argues that the extractive model creates an unsustainable economy, generates ecological damages, and results in the displacements of Indigenous communities.

MEERA BANKA

The Futility of Treatment for Narcissistic Personality Disorder

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Research on the successful treatment modalities for narcissistic personality disorder (NPD) is quite scant. This paper examines the reasons why NPD is not treatable in practice. The literature and evidence in this article refer to peer reviewed secondary sources. After reviewing several studies, the general consensus indicates the need for more extensive research to determine effective treatment options for NPD. To date, most treatment options made available (or studied by researchers) are designed to treat comorbid issues alongside NPD. This makes it difficult to find successful treatment options solely for NPD. Research should also focus on individuals suffering immense psychological setbacks caused by interaction with individuals with NPD. Therefore, the primary focus of the treatment should not be limited to those suffering from this disorder as success rates of treatments for this disorder is minimal.

GUNJAN BHARDWAJ

Exploring the Wind-Evoked Escape Response in Cockroaches

This paper explores the wind-evoked escape response behaviour in cockroaches through the lens of Tinbergen's four questions: adaptation, phylogeny, mechanism, and ontogeny. Research for this project has been compiled through a literature review of scholarly articles. Research into adaptation (how the trait increases the fitness of the species) of behaviour serves the cockroach as it permits the creature to escape predators and survive. Examining the phylogeny (how a certain trait evolved) reveals that only some cockroaches have developed the specific response. Two potential theories were found. One postulates that the evolution of a thinner cuticle increased the need for the behaviour and the other attributes it to an evolution in wings. The mechanism of the behaviour (the underlying biological function) is widely understood through the numerous studies previously conducted. Examining the ontogeny of the behaviour (lifetime development) produced conflicting results. Some studies indicate that younger cockroaches have a stronger escape response while others state that it is older cockroaches. Further research needs to be conducted into the questions of phylogeny and ontogeny to better understand this behaviour.

PROMISE BUSULWA

Coping During Covid

A pilot study on social support, mental health, and the internet

The devastating effects of COVID-19 has impacted many aspects of society. This damage will likely persist long after COVID has been eradicated. Understanding this impact with regards to psychological wellbeing is essential to helping people cope with and recover from the consequences of the pandemic. This pilot study examined people's experiences with social support (SS), mental health (MH), the interplay of these factors, and whether experiences with these factors changed as the pandemic progressed. The researcher administered online surveys to young adults living in Ontario. Participants completed questionnaires consisting of the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS), the Multidimensional Scale of Perceived Social Support (MPSS) and an independent series of nominal (yes/no), and qualitative questions. Key findings from this dataset reveal that (1) a significant positive relationship was observed between social support and mental health, (2) social support and mental health have both been negatively impacted by the pandemic, (3) while people's social relationships improved as the pandemic progressed, mental health deteriorated due to sustained periods of stress and isolation, and (4) the internet is a key resource for maintaining people's wellbeing especially as a means to remain connected with others during this time. While there is a need for more research to develop concrete knowledge bases on people's experiences during the pandemic, this study demonstrates that social support and correct use of the internet have great potential as means for people to manage mental health during this unprecedented time.

CLAUDIA DIAS MARTINS

Impact of Socioeconomic Status (SES) and Bilingualism on French Language Development in Early French Immersion

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As part of a larger longitudinal study evaluating the impact of Early French Immersion on English and French language and cognitive development, a group of children were recruited in 2017 and tested annually while progressing through grades one, two, and three. The current thesis tracked the French language proficiency and development of these students who attended public and Catholic schools across Toronto. Considering the increasing diversity of students enrolled in Early French Immersion, the purpose of this study was to investigate the effects of home language experience and parental education on language learning abilities. Narrowing the focus to French language tasks administered, data was analyzed for performance on semantic and phonological verbal fluency, sentence-to-picture matching, and standardized vocabulary tests over the three years. Background measures assessed intelligence, English vocabulary, and included a questionnaire filled out by parents providing information relevant to demographics as well as details on the child's language and social background. Based on parents' responses to the questionnaire, children were assigned to (a) monolingual or bilingual groups and (b) middle socioeconomic status (SES) or high SES groups. Following the categorical designations of these variables, the results showed effects of bilingualism and SES on different aspects of children's developing French language proficiency. The findings suggest that there is no harm in enrolling children of diverse language backgrounds in the program, however future research could explore educational supports to optimize student success in the program across SES groups.

YASMIN DINI & YANET HABTOM

eHealth in the 21st Century

The case of the FitBit Versa2

Healthcare systems across the globe face increasing incidences of non-communicable diseases which elevate the global burden of disease. Policymakers are beginning to investigate reform to improve the healthcare system and meet the growing demand (Public Health Ontario, 2019). Wearable technology can potentially cause a shift in physician and self-directed care. Current discourse surrounding the incorporation of wearable technology into the healthcare system heavily focuses on the costs. Although this is a central component to understanding and addressing the issue, it lacks contextual depth. This study frames the debate around wholesale aspects of wearable technology to include its strengths, weaknesses, opportunities, and threats through an exploration of the data collection mechanisms, privacy structures, and other aspects in place. This investigation revealed that the Fitbit Versa 2 is an innovative method of tracking key fitness and health metrics, a good motivation tool for individuals who are interested in their health, and a compact and affordable option for individuals with disposable income. The analysis determined the Fitbit's strengths includes providing timely data which empowers patients to take control of their health. Yet, these strengths are coupled with some significant weaknesses such as the high price tag on both the initial device purchase and recurrent costs, in addition to the inability to deliver specialized insights to users. All in all, as non-communicable diseases chronically overwhelm healthcare systems and the population alike, Fitbit can emerge as a tool to transform users' lives and lighten the load on the system.

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JASLEEN GOSAL

Devaluation of Women's Labour in Food Systems and Feminist Resistance

The introduction of global markets has seen the rise of multinational corporations. This has allowed trade to flourish globally and enabled the transport of regional products all over the world. Critics have drawn attention to the many issues that come with this contemporary global landscape. This research argues that multinational corporate interests perpetuate and reinforce existing gendered differences in agricultural and food systems. These differences relate to the continued devaluation of women's labour in the production of food as well as the maintenance of gendered care-work in the household. These corporate interests also contribute to increasing concentrations of wealth inequalities which put more money in corporate hands at the expense of farmers. This project conducted a critical literature review to analyze the marginalization of women's labour in and outside of the site of food production, the key components of a corporate body, and the ways in which feminist resistance occurs in opposition to corporate interests. The findings reveal that the labour of women is continually marginalized and devalued at all levels of production and manufacturing, and that women are among the most negatively impacted by corporate interests in cheap labour.

ROBERT HANLON

The Financial Shock from Covid-19 to Canadian University Endowments

The reaction, response, and implications

Using data from the University of Toronto and University of Alberta endowments from 2018–2020, this research provides a thorough analysis of the asset allocation strategies used in practice during the COVID-19 pandemic and why those alterations are essential for the future implications of the positions held by endowment funds. It will review the University of Toronto and Alberta endowments response to the COVID-19 pandemic to shed light on several existing endowment behaviour models. Findings, based on primary sources, indicate that the University of Toronto and Alberta endowments have increased the portfolio weighting in bonds, international/global equities, and alternative/other assets in 2020 relative to 2019. This implies that the portfolio weight increase in the latter three asset classifications are consistent with a Merton theoretical view of the most optimal asset allocation as compared to Black. We suggest that a Merton approach to asset allocation is advantageous when there are adverse shocks in the market. This is due to the need to balance current financial obligations with future cash flows. We support Merton's view which argues that placing a higher weight on those asset classifications demonstrates a trade-off of risks and returns to optimize resources (Merton, 1991). With spikes in current liabilities, decreasing exposure to risky short-term investments is needed to finance those activities. While on the other hand, taking on risky assets is advantageous in present circumstances to take advantage of volatilities in the markets to maximize future cash-flows' benefits.

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KRISTA HANNESEN

A Means to an End

Women in 19th-century England and its colonies

This project researches women's rights and exploitation within marriage and society in 19th-century England and its colonies. It reviews two novels, Charlotte Brontë's Jane Eyre *and Jean Rhys'* Wide Sargasso Sea*, and compares the treatment of each novel's main female characters in colonial patriarchal English society. The research sheds light on the similarities and differences between English women and women from English colonies and their treatment by patriarchal society in the 19th century. This project focuses on how the main male character in both novels, Mr. Edward Fairfax Rochester, treats his two wives: Bertha Mason who is Creole and Jane Eyre who is English. While* Jane Eyre *and* Wide Sargasso Sea *both feature Mr. Rochester and his two wives, each novel reveals different perspectives on the effect of the English colonial patriarchal system on women in the 19th century. Using a diverse set of academic articles to understand those differences, I looked for information on women's rights and expectations within marriage and society in 19th-century England and its colonies. Analysis of this information reveals that while English and non-English women were negatively affected by England's colonial patriarchal system, non-English women faced even more oppression and hardship than English women at the hands of English men. In other words, while Brontë excuses English colonial and patriarchal behaviour, Rhys uncovers the truth behind the damage such attitudes cause for minorities in England and its colonies.*

BRAXTON HARTMAN

Atypical Brain Connectivity in Autism

Autism spectrum disorders (ASD) are characterized by difficulties in social interaction and communication, as well as restricted and repetitive behaviours. Although widely accepted as being neurodevelopmental in nature, the specific abnormalities of brain function underlying the disorder remain poorly understood. A growing number of studies have investigated the neuropathology of autism using functional connectivity magnetic resonance imaging (MRI) which investigates the relations among large-scale, functionally specialized brain networks. Research studying healthy adults has demonstrated that the antagonistic "default" and "dorsal attention" networks, which subserve internally and externally directed cognition respectively, are modulated by a third "frontoparietal control" network which flexibly couples with either the default or dorsal attention network depending upon locus of attention. We investigated resting-state functional connectivity within and between the default, dorsal attention, and frontoparietal control networks in a group of 25 adult males with ASD and a control group matched on age, intelligence quotient (IQ), and motion parameters. The hierarchical organization of brain networks, assessed via agglomerative clustering, was altered in the ASD group. Region-of-interest analyses identified abnormal functional connectivity of the left frontal eye fields which were hyperconnected to the medial prefrontal cortex and hypoconnected to the insula, which are thought to mediate context-memory binding and salient stimulus detection. Finally, graph theoretic analysis demonstrated an increase in betweenness centrality of the left middle frontal gyrus (Brodmann Area 6), a crucial interconnector node, in the ASD group. These results provide evidence that the typical resting-state relationships among the default, dorsal attention, and frontoparietal control networks are altered in ASD.

ZARA ISLAM

Drug Report

Capecitabine

Cancer is a disease that causes a number of the body's cells to start dividing rapidly and spreading into surrounding tissues. Cancer is the second leading cause of death in the world with a very low survival rate. There are a few discovered chemotherapeutic drugs that show promising results for the patients and increase the survival rate. Capecitabine is one of them. It is a known orally administered fluoropyrimidine chemotherapeutic agent which is employed in the treatment of metastatic, breast, and colorectal cancers. Activated through a three-step enzymatic pathway, this drug mimics continuous infusion of 5-fluorouracil and creates 5-fluorouracil at the tumour site. As an oral agent, capecitabine is more convenient for patients and medical personnel. Also, it avoids the complications associated with venous access. This project reviews the biochemistry, Synthesis, ADME (absorption, distribution, metabolism, and excretion), toxicity profile, drug function, comparison with older drugs, and bioavailability of the chemotherapeutic drug. Capecitabine is an important new treatment option for breast cancer patients. Ongoing clinical trials can provide further information on the drug's role in a range of settings. Currently, capecitabine shows a promising future for cancer treatment.

VYJAYANTHI JANAKIRAMAN, HAILEY LUONG, & JUSTIN CHIU

Save-a-Bear

Human interactive device, addressing accessibility, emotional care, and the seriousness of teaching CPR to children, all in the comfort of one's home

This project focused on the application of the interaction design process, design knowledge and skills to design interactions with a child-size manikin for children to learn the cardiopulmonary resuscitation (CPR) technique. Despite having numerous CPR manikins and feedback devices available on the market, very few are specialized in teaching children the essential skill. The interactions with the manikin should be designed to support haptic feedback to facilitate the children's learning. The study focused on key factors that should be prioritized when developing a CPR manikin for children. The research was conducted as a group utilizing various methods, including primary/secondary, PACT, competitive analysis, and affinity mapping. Findings reveal that there is a need to address accessibility, emotional care, and the seriousness of teaching CPR.

This project led to the creation of Save-A-Bear. It is a portable and responsive CPR bear with compression and audio feedback that addresses accessibility, emotional care, and the seriousness of teaching CPR to children all in the comfort of a child's home. Features that include an inbuilt speaker that plays 100 beats per minute (BPM) songs, tracks compressions by recording metrics on the app, is easily portable, and raises awareness of the importance of understanding CPR & first-aid practices. This device assists in the transition to remote learning through its physical and digital component and at-home training program. By creating this device, children will be well equipped with the skills to deal with any future medical emergencies, to take care of themselves, their loved ones, and the community.

MOBOLUWAJIDIDE JOSEPH

Stolen People on Stolen Land

Following the global wave of Black Lives Matter protests in 2020, the question of Blackness and its construction is one that deserves further reflection if the attendant issues confronting Black bodies are to ever be addressed. More pointedly, conceptions of a Black Canada and its unique nuances have yet to be adequately mapped out in academic scholarship. This paper aims to address this specific gap by employing an etymological study of Blackness especially in relation to other concepts from which it draws its salience. By Blackness, reference is being made to conceptions of a Black Canada that is diasporic and is in conversation with multiple Black geographies (K. McKittrick, 2006), invokes more fluid conceptions of indigeneity and cultural heritage roots (T. Adefarakan, 2011; G.J.S. Dei, 2017), and seeks to resist colonial, imperialist, and neoliberal logics. In exploring Blackness in a Canadian context, I am attentive as well to the nuances of Canadian multiculturalism discourse and how it creates a Eurocentric terrain on which the Black diaspora is an addendum and largely erased.

SUMEIVA KHAMISSA

Reimagining Queer Muslim Youth

Is representation enough?

Using an anti-colonial, critical lens, I analyze two young adult novels and one film which present the lives of queer Muslim teenagers in various countries around the world. Locating themes of white saviourism, forced marriage, and the overall negative experience of being a queer Muslim. I ask myself and the readers, is representation enough? Queer children and youth rarely get to see positive examples of themselves. For queer Muslims, literature and media often is the only source where they see their inner desires mirrored back at themselves. This representation must go beyond the phenomenon of their existence, but also shed light on the happiness and fulfilment that can be experienced. Moreover, I urge non-Muslim LGBTQ+ members to move away from the colonial story line of queerness and understand that "coming out" is not the end goal for every queer person, but rather that queerness is an abstract theory that does not encapsulate every experience.

DOLUNAY KOCABAG

Social Identity of Blindness and Its Impact on Well-Being During the Pandemic

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The present study explored the social identity of Canadians with sight loss in the context of the Covid-19 pandemic. The goal of the study was to determine if measures of sight loss can predict social identity described by three factors: group centrality, group affect, and in group ties. Bivariate correlations indicated that age of onset of the sight loss, severity of sight loss, and activity impairment due to sight loss did not predict the strength of identification with the sight loss community. However, an individual's acceptance of their sight loss and their openness to share experiences related to sight loss significantly correlate with the strength of their identification with the Canadian sight loss community. The second goal of the study was to determine if sight loss social identity can play a role in the well-being of individuals with sight loss during the Covid-19 pandemic. Bivariate correlations showed that stronger identification with the sight loss community predicted lower levels of Covid-19 related stress for 3 factors of social identity.

SONIKA KUMARI

Eye Movement Desensitization and Reprocessing Versus Cognitive Behavioural Therapy

Which one is a better treatment option for post-traumatic stress disorder?

In the psychotherapy world, there is a debate over which therapy is the better treatment for post-traumatic stress disorder (PTSD). The aim of this evidenced-based project is to use research studies to identify which therapy is better to treat those suffering from PTSD. Cognitive Behavioural Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR) have both been considered as safe and effective treatments. Research evidence suggests that while CBT is somewhat more effective, it is a longer treatment and has significantly higher drop-out rates. Also, there are no CBT research studies with a control group in follow-up studies to determine the long-term effects of CBT. In contrast, EMDR is a preferred approach based on the higher efficacy, long-term therapeutic gains, short and fast treatment times and low drop-out rates. These factors provide an additional financial benefit to client populations that are only able to afford short-term therapy. More research with larger sample sizes is needed to better understand the treatment outcomes of both therapies. Future research should also focus on verifying if these treatments are effective across different cultures. Future directions also suggest that more practitioners need to be trained in order to make EMDR available to a variety of client populations.

JOUDY KUSAIBATI

Identity Text Program

How do I perceive myself in Canada as a newcomer refugee? Identity is constructed by ethnicity, gender, class, nationality (etc.), and its formation is a continuous process shaped by ever-changing life experiences. I attempted to document my identity formation through self-reflexive analysis. I observed four stages that influenced my identity in Canada (Honeymoon phase, frustration period, adjustment period, and acceptance period). My journey from Syria to Canada has made me create my current hyphenated identity and motivated me to question what it means to be Syrian-Canadian.

AUDREY LI-CHAY-CHUNG

Love the Way You Lie

A review of the psychology of lying and truth-telling in individualist and collectivist societies

A lack of consolidated knowledge of the influence of culture on the psychological processes of deception and honesty currently exists. In an attempt to address this, a comparison study of three separate studies was conducted, all of which explore the cross-cultural differences of lying and truth-telling behaviours and each presenting a new aspect to consider. The first study focuses on cultural differences in perceptions of lying and truth-telling with regards to prosocial behaviours, antisocial behaviours, and modesty; the second study elaborates by examining the influence of behavioural cultural norms; the third study centers on the interaction between culture and lying in the context of the cancer diagnosis of a family member. The conclusions from these three studies are analyzed in relation to both Western individualist and non-Western collectivist cultural standards. They are moreover used to evaluate the occurrence of lying and truth-telling in real-life contexts by means of an observational analysis of my group of friends and an examination of Lulu Wang's film, "The Farewell" (2019). The overall findings from the literature and real-world applications fortify the existence of the effect of culture on lying and truth-telling behaviours. As deception and honesty encompass a significant part of daily life, the confirmation of cross-cultural variations presents the opportunity for a deeper understanding of diverse cultures and the individuals who belong to them.

KAD MARIANO

Vive l'Acadie éduqué!

How the 1968–1969 Acadian student demonstrations redefined *acadianité* and French–Canadian education

In 1968-1969, Acadian university students protested against inequities present in New Brunswick's bilingual education system. These students reconceptualized historical understandings of acadianité*, the essence of Acadian identity, to redefine their relationship with Anglo-Canadian governance. This paper analyzes the historical progression of* acadianité *and its connection with New Brunswick's French-Canadian education system. In the 1960s, the Acadian students viewed themselves as a colonized people within an English-dominated province, redefining the Acadian imagined community. This idea contradicts the dominant Anglo-Canadian narrative of "two communities living equally." Using this conceptualization, the Acadian students mobilized to establish a dual English and French school system within New Brunswick. This semi-integrated system provided Acadians with the means for economic and linguistic development in a society that historically oppressed them. This paper also argues that the Université de Moncton was at the confluence of Acadian nationalism and governmental power. Because of its political position, the university fostered and became the medium for these student demonstrations. The 1968-1969 Acadian student protests reconceptualized Acadian nationalism and transformed Anglo-Franco relations within New Brunswick. They defied the socio-political assumptions embedded into New Brunswick society, including Acadian compliance and English dominance. This paper then details the implications of these protests on Indigenous identity and a separate Indigenous-oriented education system. Ultimately, this paper questions the relationship between education, educational institutions, and the imagined community that education serves. Education is consequently an institution that improves or limits a community's socio-political development and its ability to develop a national identity.*

CATHERINE MORIN-MITCHELL

A Path Toward Mental Health Equity

Assessing classic literature as a source of racial trauma in the classroom

Each year, mental health issues affect 1 in 5 people in Canada. Black Canadians are at a higher risk because of exposure to racism. Currently, classrooms across the country are teaching literature that presents historic racism to Canadian students. This essay explores the negative impact of racism in literature on the mental health of Black students in Canada through two theoretical frameworks. Intersectionality and the Ecosocial approach are used to identify the group most affected by racist literature presented in Canadian classrooms, as well as establish it as a mechanism through which racial trauma negatively impacts the mental health of young, Black students in high school and post-secondary programs. The perspective of Black students and Black educators shows that racism in literature is a source of racism-related stress in schools, and an increasing number of studies show that discrimination and the fear of discrimination activate the body's stress response system, which can affect both mental and physical health. The resulting analysis speaks to the responsibility and agency of institutions or individuals to understand and confront the issue. While there is not yet a definitive answer to this problem, this paper proposes a solution that will leave the literature intact and help restore the dignity of the racialized groups affected.

HANIEH NAEIMI, AYLA SADEGHI, CLARA LEONG, JOEY SI, & KATHRYN MCKIE

Does a Person's Attractiveness Influence Our Tendency to Get to Know Them?

This study investigates the effects of attractiveness on trust and decision-making. Previous research has shown that attractive people appear more trustworthy, and individuals mainly rely on facial stimuli for these judgements. We were interested to see whether when people have the chance to get a description of a face, do they still make their decision based only on visual attractiveness or do they pay attention to the description. We used the trust game, in which players are given an amount of money each round and they decide how much to transfer to another player. We modified the trust game to implement facial stimuli for hypothetical players and a hint taking option, where participants could choose if they wanted to spend money for a description of the facial stimuli before making financial decisions. This study used a repeated measures design and was conducted through an online survey using snowball sampling (N = 214). We hypothesized that participants would be more likely to ask for a hint when shown a picture of a less attractive person; however, we found the opposite only in male participants. In other words, only male participants were more likely to choose a hint for more attractive faces, which was interpreted as interest rather than caution to trust. These findings suggest that factors other than attractiveness can play a role in decisions to trust unknown individuals. Further research should investigate gender differences in hint taking and practice racial matching of participants and stimuli.

TIANA PUTRIC

The Sixth Domain

Neurowarfare, neuroweapons, and the future of counterterrorism

Technological advancements have led to the development of biochemical, pharmacological, and direct energy neuroweapons that are capable of manipulating the human brain and central nervous system. Available to both state and nonstate actors, neuroweapons can be used in military operations to enhance or degrade the physical, psychological, and physiological performance of allied forces and hostile terrorists. Neuroweapons are the future of warfare and counterterrorism and terrorism operations; however, little research exists on this subject. This project aims to contribute to neurowarfare research by uncovering how counterterrorism and terrorism forces acquire and utilize neuroweapons. This project also investigates the biological, chemical, pharmacological, and engineering processes behind neuroweapons and examines how these technologies hack into and augment the brain. This paper utilizes a three-pronged methodology: peer-reviewed literature like journal articles and books; grey literature, including sources such as government reports, articles, and exposes; and real-world case studies. Results of this research suggest that neuroweapons have ushered in a new, sixth domain of war: the human brain. Findings also indicate that neuroweapons can reduce or eliminate the primary, secondary, and tertiary effects of war, including death and displacement of innocent civilians; destruction of a nation's cultural treasures; and regression of developing nations. Finally, results support the hypothesis that populations are the new weapons of mass destruction. This project is important because it contributes to an understudied field of scholarship, forecasts future security threats, and proposes how peace-seeking forces can gain an advantage over malicious actors without inflicting collateral damage.

PARNIAN SAFARAIFARD

Why Do We Get the Urge to Squish Cute Things?

People often express superficially aggressive behaviour such as squeezing, biting and crushing in response to cute things, a desire known as cute aggression. Since the origin of this term in 2013, there have only been a few academic papers on this topic. This scoping review gathers all the available literature to demonstrate what is known so far and the areas for further research. The topics explored include why we find things to be cute, the effect of cuteness on the brain, and how it overwhelms some to result in cute aggression. The literature suggests that when we see something with "baby-like" characteristics, such as big, wide-set eyes, chubby cheeks, and thick arms and legs—characteristics formally called "baby schema"—our minds interpret it as adorable. This releases a strong, positive emotional response by activating the brain's reward system, which then motivates us to protect it. Those who experience cute aggression have an overwhelming amount of reward and emotion related brain activity in response to cute things. The findings suggest that cute aggression serves to prevent becoming overwhelmed with these strong, positive emotions by balancing them with negative expressions. Overall, cute aggression is deemed to dilute these strong emotions to aid in being a good caretaker. This topic holds clinical potential by studying how this phenomenon translates to those with disorders relating to reward and emotion. However, since this is a new area of research, it can benefit from large-scale direct replication studies before moving forward to its clinical applications.

SHERRY SCHNEIDER

Mindfulness Meditation and Obesity

Obesity is an ever-growing epidemic that contributes immensely to the world health burden. Although existing weight loss programs that use techniques such as physical activity and diet have shown significant short-term results, many participants gain back unwanted weight within three to five years. Mindfulness meditation (MM) that teaches individuals how to cultivate higher levels of mindfulness through systematic training has shown promise in areas of increased awareness and control of eating behaviours. This paper aims to explore current literature on mindfulness in relation to obesity and overweight by drawing from the results, strengths and weaknesses and overall implications of the included studies to answer the question: What effect does MM have on weight loss interventions and behaviours of overweight and obese adults in North America? A review of four studies investigating MM and obesity intervention programs was conducted with a focus on psychological health, weight loss management and eating behaviours. Results suggest that MM has positive effects on weight loss interventions and behaviours in overweight and obese adults in North America. These include improvements in mental, physical, emotional, and psychological health. In these studies, mindfulness and weight present an inverse relationship and results show promise in the implementation of MM in obesity intervention programs. Future research suggestions include an analysis of the extent to which mindfulness impacts stress and individual behaviours that lead to weight loss, as well as deciphering how mindfulness delivery methods impact outcomes such as the effects that mindfulness instructors have on participant success.

KYLIE SCHROEDER

Is That a Girl in Your Pocket, or Are You Just Abusive to Robots?

The science behind artificially intelligent technologies is developing faster than most would have ever anticipated. These technologies are beginning to span into realms that reach to include what could have once been considered science fiction, and as artificial intelligence systems become more sophisticated, more capable of social interaction, and as common as the smartphones we all keep in our pockets, our interactions with them are extremely significant. Considering that the four most used voice controlled virtual assistants all are female, either in character, or just in tone, it could be suggested then that their usage can perpetuate, normalise, and even fetishize submissive, obedient gender expectations. These oppressive views might become much more commonplace unless actively discouraged, but since AI assistants are developed to encourage user engagement, being unfailingly cheery, funny, and polite, it would mean that confrontational, quashing responses to harassment are avoided—instead opting to side-step, be coy or flirtatious, or feign ignorance. As the usage of virtual assistants continues to rise, a growing concern is that the overwhelmingly common use of a female voice in these subservient, passive roles will reinforce the aforementioned attitudes towards women, compromising our progress to equal treatment. To combat the detrimental social effects caused by female gendered AI assistants, we should make AI assistants androgynous or gender neutral. Research shows that people have an innate preference for human voices, particularly feminine ones, but that enthusiastic engagement can still be nurtured through cooperation even if the voice is eerily not-quite-female or not-quite-male.

MANMINDER SINGH

Information Diffusion, Risk Communication, Environmental Degradation, and Neo-Liberalization

How the Covid-19 global pandemic has unfolded to reveal humanity's vulnerability to a global disaster in the post-industrial age

This article, written in March 2020, explores the two dimensions of the Covid-19 pandemic: the infodemic which has raged online, and the evolution of the pandemic itself. I explore the social and technological dynamics that that have been at play including group polarization, the ambiguity of harm, and risk communication. I also contend that the Covid-19 pandemic is a technological disaster, and using the disaster cycle framework, I outline that the pandemic has been essentially a result of economic, ideological, and geopolitical decisions made starting in at least the mid twentieth century. This is a slow-moving disaster that is an indicator and a product of climate change, urbanization, and globalization. As this was a novel phenomenon at time of writing, the information sources primarily consisted of academic pre-papers, news articles, and foundational disaster-theory papers.

PHILIP STUPAR

Transnationalizing Predatory Food and Body Advertisement

Western food and body-related corporate advertising methods, when delineated into a five-category model encompassing food, gender, and body insecurity, have been assessed as potential psychic drivers of "thinness," fear of food, and the implied inadequacy of the "average" individual's body perception vis-à-vis the manufactured "beauty idol." Noting the exponential economic growth and consistent maintenance of insecurity-based advertising within Western food, diet, and media industries in the previous decades, this research sought to uncover the similarities in rising rates of North American eating disorders and negative body perceptions, their potential linkage to delineated methods of food and body-image advertising through specific industries, and their reproduction in a "non-Western" sociocultural setting. The following conclusion was subsequently reached: the perceptually negative impacts on gendered North American eating disorder and body-image rates and their methodological reproduction in the Asia-Pacific region represent a statistical tabulation suggestive of a successful "exporting" of Western corporate food and body-image advertising to demographics saturated with its subversive sub-threshold effects. This suggestion becomes particularly visible, and almost definitively exemplified, in the female-identifying populations of Fiji who are noted to have gone from a near-zero rate of medically diagnosed disordered eating and a female body ideal described as "heavier, [and] more robust," to an alarming increase in eating disorder rates and negative body-image perceptions following the introduction and subsequent accessibility of Western, specifically American, satellite television programming.

MARIA VONICA, SULTANA FOUNEV, YANA MAIOROVA, & MATEA TAUSAN

It’s the Little Things

The biodiversity and abundance of insects on Glendon Campus

Insect species are crucial to the integrity of forest environments and serve an important role in the food chain for smaller animals and birds. The aim of our research project was to determine the effects of urbanization on the biodiversity and abundance of insects in the different environmental conditions that Glendon Campus of York University (Toronto, Canada) offers. We set up 4 pitfall traps in 3 different sites on campus: one in an isolated forest, one by the Don River, and the final site by a highly circulated road. We hypothesized that the insect volume would be lowest by the most urban environment (i.e. the road) and the highest in the most natural environment (i.e. in the isolated forest). After a week of specimen collection and microscope identification, our results showed both the most biodiversity an abundance as predicted in the most isolated forest environment and the least amount in the humid environment by the Don River. This highlighted the importance of forest preservation, as it does affect insect species, but also can be extended to other mammals and avian species that prefer undisturbed environments.

HARMONI WATSON

The Consequences of Police Brutality on Psychological Well-Being and Collective Action

Over the last year, police killings of unarmed Black men and women have led to worldwide protests against police brutality and anti-Black racism in the justice system. Research on racism suggests that being the target of racial discrimination can have averse psychological consequences, but there is a lack of research on the psychological effects of experiencing police brutality. The goal of this study is to investigate whether exposure to police brutality affects the self-esteem of Black students. I will also examine whether exposure to police brutality affects the willingness of Black students to participate in collective action as past research indicates that perceiving discrimination is associated with greater support for political action. One group of participants will read an article describing a situation involving police brutality against a Black victim while another group will read an identical article but with a non-Black victim. After reading the articles, participants will complete measures of stated self-esteem, willingness to participate in collective action, and support for the Black Lives Matter movement. I hypothesize that participants who read an article about police brutality with a Black victim will have lower self-esteem and a greater willingness to participate in collective action than participants who read the article about police brutality with a non-Black victim. If the results support this hypothesis, it will suggest that exposure to police violence has a negative effect on the mental health of Black individuals. It will also provide further evidence for the perception that injustice against the ingroup can lead to greater support for political action.

JONELLE WAUGH

Food Deserts in Toronto

My article discusses the prevalence of food deserts in Toronto. A food desert can be defined as a geographical area where there is limited access to affordable and healthy food options. These are most common in low-income communities. The purpose of my article is to discuss food deserts in the city of Toronto and why they occur, in relation to the bigger issue of food insecurity. I apply themes of urban environmental justice to explain that there is a link between urban food deserts and low-income people of colour, which puts them at an increased risk for unhealthy diet choices. I used the York University library to access journal articles and other resources that gave me the insight to define food deserts, identify the location of convenience stores in Toronto, and relate this connection to low-income communities. I found that layering disadvantages such as low socioeconomic status, poor access to transportation, and distant proximity to supermarkets contribute to the making of food deserts and cause other complications such as a rise in diet-related diseases. I conclude by suggesting some solutions to food deserts/ food insecurity. These include: the use of community gardens throughout the city which in turn supports the local economy; food trucks that travel to low-income communities to provide healthy foods at a reduced cost; community fridges where residents support each other by putting fresh foods and produce into refrigerators (currently in 5 locations across the city). However, instead of applying "band-aid" solutions to food insecurity, in the larger scheme of things there is a need for fundamental structural changes to food policies in Canada that can change a neighbourhood's food environment and provide healthy food options.

Directives aux auteurs

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