Gender inequality is a pressing issue on a global scale, yet studies on this important issue have stayed on the margins of open and distance learning (ODL) literature. In this study, we critically analyse a batch of ODL literature that is focused on gender inequality in post-secondary and higher education contexts. We use Therborn’s social justice framework to inform and guide the study. This is a comprehensive social justice lens that sees inequality as “a life and death issue,” approaching empowerment as a central area of concern. Qualitative content analysis of 30 years of peer-reviewed literature reveals patriarchy and androcentrism as significant mechanisms that continue to produce gender inequality, in particular in women’s access to educational resources and formal learning opportunities. We highlight three themes that emerged in the content analysis: (1) ODL and equal opportunity; (2) Feminism and gender-sensitive curriculum design; and (3) Culturally relevant curriculum design. We critique views of access to technology-enabled education as an instrument for social justice, and provide a pedagogical model for an ODL curriculum centred on empowerment and agency, two concepts closely linked to existential inequality. We argue that such a curriculum is public service and requires a model of education that is based on participation and co-construction, and lies at the intersection of critical, feminist, and culturally relevant pedagogical practices.

**Keywords:** distance education; gender inequality; gender studies; open and distance learning; social justice; women empowerment

**Introduction**

According to the United Nations Gender Inequality Index report (UNDP 2018):

Gender inequality remains a major barrier to human development. Girls and women have made major strides since 1990, but they have not yet gained gender equity. The disadvantages facing women and girls are a major source of inequality. All too often, women and girls are discriminated against in health, education, political representation, labour market, etc.—with negative consequences for development of their capabilities and their freedom of choice.

Given that gender inequality remains a pressing issue in both the Global South and Global North, we might expect the educational literature to thrive with studies on gender inequality, offering much needed critical debates and practical solutions for equity and empowerment. Yet, the scholarly literature on the issue falls short compared to non-academic spheres of influence, such as the work of international development agencies (Stromquist 2015). For example, in a remarkable research exercise, Stromquist (2015) searched article titles “in three prestigious comparative education journals (Comparative Education Review, Compare, and the European Journal of Education)” and identified only “three articles using ‘empowerment’ in their title” within a span of 10 years (2015: 307). In the context of open and online education, Czerniewicz (2018a: 130) draws attention to the lack of inequality-framed studies in online education and calls for “critical research” in higher education contexts. Similarly, Lambert (2018) criticizes the lack of “Open Education literature focusing on social justice” despite the field’s historical and philosophical commitment to reach disadvantaged and marginalized learners.

The aim of this study is to address this gap by providing an overview and critical analysis of Open and Distance Learning (ODL) literature focusing on gender inequality. We conceptualize gender inequality as a complex and intersectional issue, which is related to at least three dimensions of inequality: vital inequality, resource inequality, and existential inequality (Therborn 2013). These dimensions are explained in the Background section of this paper. Considering the scope of this research, it is important to define ODL to situate the study in the broader context of...
open education. The differences between ODL, Distance Education (DE) and Online Learning can be subtle, as they might refer to similar types of educational modes or regulatory practices in different countries and regions. Conrad (2008: 76), for example, notes that, “by definition and through practice, distance education has become synonymous with innovative models of program delivery that offer more generous open and flexible learning opportunities to wider and more diverse audiences than traditional classrooms.” In this study, we use ODL as an umbrella term that refers to approaches that “focus on opening access to education and training provision, freeing learners from the constraints of time and place, and offering flexible learning opportunities to individuals and groups of learners” (UNESCO 2002: 7).

In this context, we explore the following research questions:

1. To what extent and in what ways is gender inequality addressed in studies focusing on women in ODL?
2. What trends and patterns can be observed?
3. What are some implications that can be drawn to address gender inequality in and through ODL?

**Background**

We use Therborn’s social justice framework to guide the approach to the study, the search strategy and parts of the data analysis. This is a comprehensive social justice lens that sees inequality as “a life and death issue,” approaching empowerment as a central area of concern (Therborn 2013). Therborn (2009, 2012, 2013) analyses inequality through three lenses: *vital inequality, resource inequality, and existential inequality*. These dimensions “are interrelated and interacting, but irreducible to each other” (2012: 579).

**Vital inequality** refers to socially constructed unequal life-chances of human organisms (Therborn 2013: 48). It adversely affects one’s “health and longevity” and is measured through “life expectancy and survival rates” (2009: 1). There is strong evidence suggesting an association between educational attainment and life expectancy (Erdogan, Yildirim & Tosuner 2018). Gender inequality in particular has an adverse effect on mothers’ life expectancy and quality of life, but also tragically “has a potential strong effect on infant and under-five mortality rates” (Erdogan, Yildirim & Tosuner 2012: 1860).

**Resource inequality** is concerned with a range of capitals; for example, economic, cultural, and institutional (Czerniewicz 2018a). Therborn (2009) distinguishes two types of resource inequality: (i) inequality of access; that is, discrepancies “in access to education, career tracks and social contacts,” and (ii) inequality of rewards, which can be described as discrepancies in outcomes from access to resources (e.g., income, recognition, certification, awards, gains, etc.). Inequality of access is the type of inequality mainstream ODL discourse is most concerned with, as access to educational materials and resources are often equated with democratizing the field of education. Indeed, von Prümmer (2015: 33) argues that “[t]he two concepts of distance education and equal opportunities are almost universally linked in the minds of educators, politicians, and students. The link has become even stronger with the bracketing of ‘open and distance learning’ in a single phrase and often referred to as ODL.” However, as Knox (2013) notes, this reflects an instrumentalist view of Open Education, which ignores the “broad pedagogical, philosophical and political presuppositions already encoded in the systems used” (2013: 24).

There is a tendency to view resource inequality as a ‘third world’ problem, which is often reinforced by the popular imagery of notable organizations such as the United Nations and UNESCO. The problems developing nations have in terms of access to education, healthcare and social services are indeed well-documented in studies and reports, such as the annual United Nations Millennium Development Goals reports (see United Nations 2015). However, resource inequality is by no means limited to underdeveloped nations or traditional communities. von Prümmer (2015: 32) notes “geography and isolation,” “lack of mobility due to physical disability or private circumstances,” and “social barriers, such as exclusion from education on the grounds of class or ethnicity, gender or age” as some common barriers to women’s access to formal education worldwide. Heiler and Richards (1988: 192), for example, explain how in Australia rural women in particular are disadvantaged by the country’s vast and isolated areas:

Local conditions such as bad roads, inadequate public transport, and the generally higher costs of fuel in country areas restrict [women’s] mobility and access to the limited health, welfare and educational services available to [women]. Thus, for rural Australian women, distance and isolation usually go hand in hand, greatly affecting their chances to gain education, training and employment.

von Prümmer (2015: 40) further documents the problem of class and gender in European education in depth, and, in the context of Germany, notes how “women from a working-class background have even fewer opportunities than their male peers to enter secondary schools and later universities.” In the United Kingdom, gender inequality and limited social mobility go hand in hand: “Deep structures, including poverty and class and gender inequalities, shape the lives of families and individuals in ways that are not easily changed by educational intervention” (Barker & Hoskins 2016: 73). In Finland, Iceland and Sweden, factors like class and gender have an adverse effect on students’ academic progression and career paths (Nylund et al. 2018).

**Existential inequality** restricts the freedom of action of certain categories of persons (Therborn 2009: 2) and can be examined through five lenses: self-development, autonomy, freedom, dignity, and respect. Inequalities in these dimensions mean the “denial of (equal) recognition and respect” (Therborn 2009: 1). Surprisingly, existential inequality is the least recognized and explored form of inequality in social sciences (Czerniewicz 2018a, Therborn...
2013). This is significant, as existential inequality is strongly connected to the overlapping concepts of empowerment and agency—which are two underexplored issues in the educational literature on gender equality (Stromquist 2015). One exception is the work of feminist scholars, who have produced significant work as early as the 1980s, critically exploring the intersection of distance education and women empowerment, as our study shall demonstrate.

Methodology

Research Design and Research Corpus

We used a rapid evidence assessment/review design (Gough, Thomas & Oliver 2012; Noble & Smith 2018) to identify and evaluate sources, and synthesize findings. This method is useful to draw boundaries to research; however, it does not yield results as comprehensive as in systematic reviews—the method is limited in terms of resources and time frames.

In order to identify articles that are relevant to the research, we first used the Scopus database, searching for the following keywords in article titles: ["women" OR "female" OR "gender" OR "feminism" OR "feminist"] AND ["open and distance learning" OR "online learning" OR "distance learning" OR "open and distance education" OR "online education" OR "distance education"]. We also extended the search to the International Women Online Journal of Distance Education (intWOJDE) first issue, as although the journal is not indexed in Scopus its scope is directly relevant to the research. The initial screening resulted in 58 studies published between 1988 and 2018. We then examined the articles according to the following inclusion criteria: (1) the study is a peer-reviewed article (this was done to achieve coherence within the research corpus and to limit the scope), and (2) the study clearly identifies at least one issue related to gender inequality and provides educational implications to address the issue. The final research corpus constituted 34 studies (see Appendix A), representing studies from 19 countries, published in 18 journals. As we used Therborn’s inequality framework to constitute the research corpus, all the studies in the final batch reflect at least one aspect of gender inequality (vital, resource or existential inequality) either in their discussions or conceptual frameworks. The references for the papers included in the research corpus can be found in Appendix A.

It is important to note that although we used Therborn to identify relevant articles for content analysis and as a conceptual lens to discuss their contents, an additional framework by Czerniewicz (2018b) helped us with the data analysis. Czerniewicz, based on Staton’s (2012) work, argues there are four central dimensions in college education: disciplinary knowledge, opportunities, experiences, and graduateness. As Therborn’s work is grounded in the field of Sociology, these dimensions were used as a starting point to firmly focus the data analysis on educational contexts, and accordingly educational implications, and draw boundaries to the data analysis. For example, if an article discussed how to best provide support to teach disciplinary knowledge, we noted this and looked at how this discussion related to gender inequality as discussed in Therborn. As such, the analysis was iterative and comparative, as we further explain below.

Data Analysis and Credibility

We used content analysis (White & Marsh 2006) to analyse the data and report findings both qualitatively and quantitatively. In order to achieve interpretive rigor (Teddlie & Tashakkori 2009), we sought interpretive consistency and theoretical consistency. The following strategies helped us achieve calibration in the qualitative content analysis: (i) regular online meetings and chats in which we, the authors, discussed the different dimensions of inequality and how they might relate to the studies in the research corpus; (ii) a coding scheme with exemplar quotes; (iii) a transparent and collaborative approach to coding and analysis (all spreadsheets and documents were shared online with the research team).

Four of the researchers first analysed a section of the identified papers individually and noted their findings according to predetermined categories and criteria. We examined overall research trends, the types of inequality addressed in the studies, reasons for inequality (if noted), and educational implications. Finally, we identified some themes that strongly emerged in the coding process through group discussions. Rather than applying and calculating inter-coder approaches, we reached consensus on issues through an iterative and transparent process of data analysis and interpretation.

Limitations

A limitation of this research is that we used article titles only in our initial sampling. This was done to draw boundaries to our research and to be able to engage in a close reading of relevant articles. However, in doing so we acknowledge the fact that we omitted other literature on gender inequality in ODL. In addition, we also acknowledge that extending the scope of the research (e.g., searching articles through additional databases) or examining publications in grey literature may lead to different research results.

Trends and Patterns

The final collection of papers covers 30 years of research published between 1988 and 2018 (Figure 1). The earliest contributions to the literature in the late 1980s and early 1990s correspond with the “feminist concerns [that] have surfaced distance education worldwide” during that time (Faith 1988: 75). Many notable scholars in this period brought issues regarding gender to the fore in distance education with their research and practice (see, for example the works of Burge, Faith, Kirkup, and von Prümmer in Appendix A). The peak in 2012 (Figure 1) corresponds with the first issue of WOJDE, as three of the four studies in 2012 were published in the journal.

Out of the studies in the research corpus 19 papers explore issues in the context of Global South countries (i.e., China, Ghana, India, Malaysia, Mongolia, Nigeria, Pakistan, Palestine, Papua New Guinea, Saudi Arabia, Tanzania, and Zimbabwe) (Figure 2) while 15 studies discuss issues related to Global North countries (i.e., Australia, Canada, Germany, South Korea, Turkey, UK, and USA).
The research orientations in the studies are almost equally distributed amongst quantitative studies (constituting 26% of the research corpus), mixed methods studies (24%), qualitative research (24%), and opinion papers and review studies (26%). In terms of theoretical and/or conceptual frameworks used, 23 studies (67.6%) did not use or explicitly mention any theoretical or conceptual frameworks in their full-texts. Only eleven of the 34 studies used a clearly defined framework — it is interesting to note that of these eleven, ten (29.4% of the total research corpus) used feminist pedagogy. Andragogy, constructivism, transactional distance theory, and critical pedagogy were used as additional theoretical/conceptual frameworks in the studies.

**Inequality Type and Mechanisms that Produce Inequality**

All the studies examined clearly demonstrate that the way societies are structured traditionally, culturally, and politically, and the system of education itself, can become significant barriers to women’s education. Understanding how and why societies are structured in the way they are is beyond the scope of this paper. However, informed by Therborn’s (2013) inequality framework, we can report on the types of inequalities that are discussed in the studies ([Figure 3](#)) and the mechanisms that produce them. Resource inequality is the most pressing issue in most of the studies (58%), followed by existential inequality (34%) and vital inequality (8%). However, it is difficult to draw clear boundaries between the three types of inequalities, as they are often discussed in relation to one another and without the use of an explicit framework. As such, this visualization should be understood as an interpretive representation of study contexts.

**Patriarchy** is noted as a major cause and perpetuator of women’s lack of education, especially in studies that explore gender inequality in the Global South (e.g., for Saudi Arabia, see Adham et al. 2018; Pakistan, see Bukhsh 2013; Zimbabwe, see Mapolisa & Chirimuuta 2012; Papua

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**Figure 1:** Time series graph (1988–2018).

**Figure 2:** Geographical distribution of study contexts, where applicable (also see Appendix A).
New Guinea, see Phillip 1993). However, patriarchy is also a common thread in the studies from the Global North, as women are disadvantaged by societal expectations and roles, especially in terms of childcare and domestic work, which results in significant inequalities in their access to higher and further education opportunities and career progression (e.g., Cragg, Andrusyszyn & Fraser 2005; Kirton & Greene 2002; von Prümmer 1994). Furthermore, studies report that even if women do have access to education, they may be disadvantaged by the androcentric worldview that shapes the society and its institutions, including higher education (e.g., Burge & Lenksyj 1990; Patterson 2009; Pyn 1992). The exploitation of land and people (Azaiza 2012; Gudhianga, Magadza & Mafa 2012), poor economy (Malik 2010; Sloper 1990), perceived competencies in technology-use (Atan et al. 2002; Bhushan 2008), and transition into market economy—the privatisation of state enterprises with cuts in social services and benefits—(Robinson 1999) are also reported as mechanisms that produce and/or perpetuate gender inequality.

**Thematic Analysis of Educational Implications**

Educational implications in terms of disciplinary knowledge, opportunities, experiences, and graduateness (Czerniewicz 2018b) vary in the studies, and cover a range of areas including mode of study, instructional technology, curriculum design, support systems, professional development, funding, policy, regulations, law, quality, and finance. Three areas that had the most weight in the studies were mode of study, curricular design and resources, and support (Figure 4). We focus on curriculum and mode of study in relation to one another in this study and refer to other areas to give depth to the discussions.

*Mode of study* refers to the type of delivery (e.g., face-to-face, online, blended, etc.). In the context of this study, it should be understood as a system of education that affords certain ways of learning to occur. *Curriculum* refers to “learning standards or learning objectives [educators] are expected to meet; the units and lessons that teachers teach; the assignments and projects given to students; the books, materials, videos, presentations, and readings used in a course; and the tests, assessments, and other methods used to evaluate student learning” (The Glossary of Education Reform 2015).

Many studies in our research corpus advocate for technology-mediated education (i.e., ODL, DE) as a means for women empowerment and social justice (see for example, Bukhsh 2013; Burge & Lenksyj 1990; Chung 2016; Msoffe 2016; Olakulein & Ojo 2006). However, there are differences in the way technology-mediated education is viewed, as discussed in the theme ‘ODL and equal opportunity.’ We further discuss two related themes: ‘Feminism and gender sensitive curriculum design’ and ‘culturally relevant curriculum design.’ These themes are presented next (please see Supplementary File 1 for sample quotes supporting each theme).

**ODL and Equal Opportunity**

In the ODL literature, the affordances of ODL—such as learning anytime, anywhere, at low cost, and with flexible entry—are often posited as strategic responses to the barriers in women’s education. A common argument is that “education opens the opportunity and choice for women” (Olakulein & Ojo 2006: 50) and that “access is the most fundamental piece of equity in education, specifically for countries with limited resources for quality education” (Galeshi 2017: 43). Thus, access to online and distance education is viewed as an opportunity for equity, an innovation which has the potential to transcend the limits of traditional, face-to-face education. One strong example would be Bukhsh (2013: 22), who, in the context of ODL in Pakistan, wrote:
There is need of another system of education with equal opportunities of education to male and female. We need a system to remove injustice in gender. Such system of education is 'Distance System of Education.'

ODL is also viewed as a ‘cost-effective, convenient, conducive, efficient and comprehensive’ system to educate masses and prepare them for a global economy (Olakulein & Ojo 2006: 51). A related view is that ODL can help women “meet their educational aspirations as they meet the obligations of society and career” (Kwapong 2007: 77) and as they “fulfil family responsibilities” (Atan et al. 2005: 118). Olakulein and Ojo (2006: 152) note:

The concept of open and distance education is a scheme that affords a nation the opportunity to effectively transmit educational benefits to all its citizens cheaply and more effectively, especially those hitherto unreached or denied access on the basis of one social consideration or the other. Nigerian women undoubtedly fall within this category and this system of education affords them the opportunity to pursue the gift of knowledge without contradicting any societal dictates. The uniqueness of distance education as a women empowerment strategy can be gleaned from the fact that it straddles so many facets of the social system.

The assumption in general within this theme seems to be that access to ODL—viewed as a cost-effective resource for building human capital—is an excellent starting point for elevating women’s socio-economic status in society. However, studies in our research corpus also demonstrate that a determinist view of ODL may not align with the lived experiences of women and furthermore may overlook or even perpetuate the mechanisms that produce gender inequality in the first place. For example, Demiray (2014: 334), citing Hipp (1997: 41), notes, “the problem is not only women’s equal education opportunity, but also their equality in the system. A patriarchal social system that ignores women’s needs will naturally not provide [their equality in the system of education].” Patterson (2009) calls for a need to “pay attention to the contexts of women’s learning” and how “their daily routines, family responsibilities, and socio-economic status position them as distance learners.” Otherwise, Patterson argues, “distance education becomes part of the problem, one that contributes to women’s social inequalities by perpetuating women’s roles as primarily wives and mothers relegated to the domestic sphere” (Patterson 2009). Similarly, Sen and Samdup (2009: 165) note that “gender both structures and influences the world of the learner and learner experience; therefore, learning needs to be contextualized to women’s personal, social, mental and emotional milieus,” and thus the cultural context in which they live.

Furthermore, ODL as a mode of education does not always emerge out of egalitarian concerns. Aneja (2017) warns that the commodification of higher education in neo-liberal economies positions ODL as a niche market responding to the ‘needs’ of women learners, which are often created by the global market itself. We observed that feminist studies in our research corpus provide a more critical view of open and distance education, as while they celebrate the opportunities provided by online education, they are cautious to view it as a means for social justice. We discuss feminist and gender sensitive views (as these are not necessarily the same) next.

Feminism and Gender Sensitive Curriculum Design

A prominent theme that emerged in the content analysis was gender sensitive design. The main argument for gender sensitive design could be summarized as: “[women] may be different [than men], both in the experiences they bring to their studies and the ways in which they learn” (Taplin & Jegede 2001: 133), and therefore, it is imperative to align education with women’s particular needs and learning styles. One example for gender sensitive curriculum design would be making learning a social experience for women students through opportunities for networking and support (for example, see Kirkup & Von Prümmer 1990). Some issues that are commonly noted in relation to gender sensitive curriculum include:

- the curriculum is based on “established bodies of knowledge that reflect a male point of view” and ways of delivery (Kwapong 2007: 54; Kwapong 2008);
- the curriculum does not represent women’s interests, needs;
- the curriculum is designed for the imaginary self-directed and independent learner, which is often a male (von Prümmer 1994);
- the curriculum does not provide social connectedness and opportunities for networking (Kirkup and Von Prümmer 1990; von Prümmer & Rossie 1988; Taplin & Jegede 2001);
- the curriculum does not promote gender consciousness (Kwapong 2007); there is use of sexist language and content (von Prümmer 1994).

Another theme which emerged in the data analysis in relation to gender sensitive design was feminism. Feminism and gender sensitive design often overlap, but they are not necessarily the same as gender sensitive design may be limited to discussions on gender differences and may not have a social justice agenda. For example, one study we did not include in the research (due to our conceptual framework) was Marley (2007) who conducted a meta-analysis on gender differences and DE to draw implications for practice for Library Education. This study provides an extensive analysis of literature on gender differences in learning but fails to provide any discussion on the social construction of gender and gender inequality and how those might impact students’ learning preferences and choices. Because gender difference is viewed from a cognitive point of view, narrowly constructed “female/feminine” and “male/masculine” pedagogical implications are offered in the study, with no explicit links to social justice or women empowerment.
Feminist pedagogy, on the other hand, weaves issues with inequality—in particular existent inequality (i.e., self-development, autonomy, freedom, dignity, and respect)—and ODL into one another. The way to go about feminist pedagogy may vary, but in its core, feminist pedagogy has a clear political orientation: to “generate awareness about social inequalities, including gender discrimination, and foster an egalitarian attitude towards women and traditionally oppressed groups” (Chung 2016: 374). Perhaps because of this close connection to social justice, feminist scholars in our research corpus tend to avoid a deficit view of women students or narrowly constructed views of gender differences (e.g., gender-based learning styles). Rather, they acknowledge the social mechanisms that cause gender inequality in the first place and focus on women’s agency in their learning. They also highlight collaborative, community-based and learner-centred approaches to teaching and learning (see for example Care & Udod 2013).

Feminist literature further provides important strategies to address gender inequality in and through open and distance learning. Faith (1988), for example, in one of the first studies in our research corpus, “Gender as an issue in Distance Education,” notes,

In the transformation of education toward more egalitarian models, it is essential to make authentically visible any group which has been heretofore ignored, distorted, and/or vilified. For example, students must find themselves accurately represented in course materials. It is relatedly essential that gender inclusive language be the norm (1988: 75).

Faith (1988: 10) also draws attention to issues with classroom pedagogy, support, and counselling for female students, and under-representation of women “in traditionally male-dominated subjects like maths, science and technology.” Similar arguments also appear in von Prümmer and Rosie (1988) and in consequent studies by Burge and Lenksjy (1990) and Kirkup and von Prümmer (1990).

It was interesting to see in the research corpus a new wave of contemporary feminist scholars who call for a need to “reconcile feminist pedagogy with DE” (Aneja et al. 2018; Burge & Lenksjy 1990; Chung 2016; Demiray 2014; Jung 2012; Robinson 1999). For example, Robinson (1999) reports on how nomadic Gobi women in Mongolia benefited from a distance learning curriculum that was designed in a bottom-up manner, taking their local experiences and needs into consideration. In a different social and cultural context, Adham et al. (2018) report on the use of a female avatar in a MOOC to address gender segregated education prevalent in Saudi Arabia.

It is important to note that culturally relevant pedagogy does not necessarily have a social justice agenda—it may work in harmony with cultural viewpoints rather than carrying with it a commitment to challenge the way societies are constructed. However, in some cases, it is an essential part of feminist pedagogy. Burge and Lenksjy (1990: 6) for example say:

The content of the resource materials needs to reflect the experiences of women who live in smaller towns or in rural areas. This is not to suggest that readings on urban women or on global feminism should not be included; rather, the readings would reflect the great diversity in women's living conditions, needs, and experiences.

Implications for Practice

Access to education does not guarantee the removal of gender inequality that is deeply rooted in a society historically, culturally, and politically. As some of the studies in our research corpus show, the way educational programmes, resources, and activities are designed, and the way women are (not) supported in their educational journey can, in fact, perpetuate existing inequalities in society. To what extent are women able to make informed choices as to what to study? Does the curriculum recognize the complex lives of women and reflect a sensitivity to their struggles through policy and practice? How could women be supported organizationally and pedagogically to gain the most from their studies? The overlapping issues of patriarchy and androcentric worldviews are often noted as a major barrier to women’s education, whether on a macro level such as social systems, or on a more micro level, such as in course materials or resources. Based on our review, we identify several issues in the existing literature that must be addressed.

First, the barriers to women’s education and educational implications in response to the barriers we noted here are messy, sometimes contested, and most importantly, repeat themselves in the research corpus. We see the same kinds of problems noted over a span of more than 30 years, with practical implications that are still valid and important to consider in today’s education. Theory and practice on the intersection of gender inequality and ODL seem to be developing very slowly and are somehow disconnected from the mainstream discourse on open education. Our

Culturally Relevant Curriculum Design

We noted a few studies in our research corpus that provide strong examples for culturally relevant pedagogy, that is, the design of educational materials and curricula that are relevant to learners’ local learning contexts (i.e., Adham et al. 2018; Burge & Lenksjy 1990; Chung 2016; Demiray 2014; Jung 2012; Robinson 1999). For example, Robinson (1999) reports on how nomadic Gobi women in Mongolia benefited from a distance learning curriculum that was designed in a bottom-up manner, taking their local experiences and needs into consideration. In a different social and cultural context, Adham et al. (2018) report on the use of a female avatar in a MOOC to address gender segregated education prevalent in Saudi Arabia.
research suggests that many important studies on social justice (i.e., in our context, on removing gender inequality) do exist, which challenges the view that there is a lack of literature focusing on social justice in open education (for example, see Lambert 2018). Rather, such studies have stayed on the margins of the ODL literature. It is imperative that we revisit some seminal past research and debates on gender inequality in ODL, learn from and build on these important contributions and center them in the discourse on social justice in the ODL literature. Otherwise, there is a risk that “existing knowledge will be ... rediscovered” or will be completely forgotten (Weller et al. 2018: 122), together with the community of scholars who have produced that knowledge.

What seems to be novel in the recent literature is the lessons learned from online networking, collaboration, and activism in feminist pedagogy; in other words, the “reconciliation” (Aneja 2017) of feminist pedagogy with ODL. Yet, there is very limited discussion on how ODL curricula with a social justice agenda might benefit from activism and online networking opportunities and tools in our research corpus, which calls for future research. We would also like to note that OER is an area of research that is almost absent in the entire research corpus, except for some limited discussions on MOOCs.

Second, and also related to the point above, there is limited discussion in the literature on how digital literacies and skills and perceived competencies in technology may affect women’s learning experiences and educational outcomes. This is particularly at odds with views that advocate for ODL as a vehicle for equal opportunity without considering the socio-cultural context of technology use. To what extent can women fully embrace digital technology and its affordances in a socially unjust society, where resources are rare, time is precious and social support is limited?

Third, in some studies, we observed a misalignment between the types of inequalities discussed in the studies and the solutions provided in response to those issues. ODL, as a visionary idea, promises equity, social justice and lifelong learning opportunities. Technology integrated open and flexible solutions are viewed as an opportunity to achieve these noble visions; yet, on the other hand, such promises remain unfulfilled and flawed because they ignore cultural and contextual realities that lead to inequality and the values embedded in educational systems and tools. If patriarchy, for example, is a system that leads to inequality, it is unrealistic to assume that access to technology alone can fix the problem; there is a need for social, economic, and pedagogical interventions that directly address patriarchy instead.

Finally, we would like to caution against narrowly constructed views of designing for ‘gender differences’ in ODL pedagogy. Gender inequality cannot be addressed with separate designs for men and women, or by equating independent learning or behaviourism to male learning styles. We observed that while feminist studies draw attention to the fact that women may prefer learning in connected and collaborative ways, they also acknowledge the gendered construction of women’s roles and identities, which may impact the ways in which they learn. Our view is that all students would benefit from an ODL model that focuses on the learner experience, as opposed to a cognitive model that privileges mastery of educational content in isolation from socio-cultural realities. As Faith (1988: 79) argued, “egalitarian philosophy and practice would benefit all of humanity.”

Conclusions and Future Directions

Important implications for ODL, particularly in terms of curriculum design, can be drawn from the study. As a first step, it is important to recognize the fact that women have unique struggles and issues which affect their educational journeys, the choices they make and the rewards they gain. With this recognition comes the need to acknowledge and address different dimensions of inequality (e.g., vital, resource, existential). As we noted in the background section of this paper, the overlapping concepts of empowerment and agency are closely linked to existential inequality, which deals with self-development, autonomy, freedom, dignity, and respect (Therborn 2013). A curriculum centred on empowerment and agency is public service and requires a model of education that is based on participation and co-construction, and that is committed to social justice (Table 1). In an era where neo-liberalist agendas view higher education as an emerging market for profit, such a model of education should be supported by government and funding agencies (Jones 2019), and ODL institutions/organizations themselves, with an explicit goal to remove gender equality.

To this end, the literature shows that the intersection of three pedagogical approaches is promising to address gender inequality in and through ODL: culturally relevant pedagogy, feminist pedagogy, and critical pedagogy (Figure 5). Culturally relevant pedagogy recognizes students’ lived experience, their local environment and socio-economic and socio-cultural conditions of living. From a culturally relevant or responsive perspective, technology should be adapted to local conditions and appropriate levels of support should be an integral part of educational provision.

A curriculum centred on empowerment and agency should also challenge some cultural and traditional assumptions and political systems to dismantle hierarchy, oppression, and exploitation. As Therborn (2013) notes, such structures are socially constructed, they “can be dismantled or flattened” (p. 63). Critical pedagogy in general and feminist pedagogy in particular are useful to challenge oppressive mechanisms of power, such as patriarchy, as well as to “humanize the curriculum” and “surface the student voice” (Czerniewicz 2018b), both in content and form. As a starting point, as Burge and Lenksyj (1990) note, “[w]hether or not the content of the course is explicitly feminist, gender analysis of that content, along with the recognition and validation of female learners’ specific life situations and experiences, needs to be integrated into the teaching and learning process” (p. 35). In the spirit of Freire (1976), we also call for a need to design for the kinds of experiences that lead to critical consciousness—in our context, a heightened and critical awareness of inequality in society based on the intersection of gender, class, ethnicity, etc.—and the design of curricula that allows for praxis: iterative cycles of reflection that lead to
meaningful action. Co-construction, active student participation and shared learning are major aspects of such transformative pedagogies. These approaches should not be limited to subjects such as Women's Studies or Education, nor should they be targeted for women only; transformation requires interdisciplinary and collective efforts. As Kirkup and von Prümmer (1997: 59) suggest, “Educators involved in women's education and in women's studies need to be involved in bringing what has been learned in these initiatives into mainstream educational programmes.”

Finally, participatory approaches to curriculum call for participatory approaches to research and scholarship, which seems to be lacking in the ODL literature. Methods like participatory action research, community engaged research, or phenomenology were absent in our research corpus, yet these are the types of methods that would be very valuable in understanding women's experiences in ODL and help educators design programmes and curricula in partnership with women students.

Notes
1 In our discussions we use “women” to refer to a gender identity, recognizing gender fluidity and subtlety.
2 See for example the definition of women empowerment by The United Nations Population division (as cited in Statistical Yearbook for Asia and the Pacific 2013): “Women’s empowerment has five components: women’s sense of self-worth; their right to have and to determine choices; their right to have access to opportunities and resources; their right to have the power to control their own lives, both within and outside the home; and their ability to influence the direction of social change to create a more just social and economic order, nationally and internationally” (p. 154).

Additional Files
The additional files for this article can be found as follows:

- Appendix A. List of Studies. DOI: https://doi.org/10.5334/jime.553.s1
- Appendix B. Alignment with Thematic Analysis. DOI: https://doi.org/10.5334/jime.553.s2

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Competing Interests
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