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Editors' Note:

We are happy to present to you the 2021 issue of our journal. *IAFOR Journal of Psychology & the Behavioral Sciences* covers a variety of empirical studies about applications of psychological theories in educational and mental health settings. Moreover, the journal showcases studies that investigate topics regarding human development, psychological outreach services, family studies, as well as articles addressing the needs of at-risk children, youth and families, and vulnerable populations.

The *IAFOR Journal of Psychology & the Behavioral Sciences* is a peer-reviewed, editorially independent, and an interdisciplinary journal associated with the IAFOR (The International Academic Forum) conferences on Psychology and the Behavioral Sciences. This issue is devoted to several interdisciplinary studies which represent diverse topics, cultures, and disciplines in the fields of psychology and the behavioral sciences. All manuscripts published in the journal have been subjected to the thorough and accepted processes of academic peer review.

We want to express our sincere appreciation to all reviewers for taking time from their busy schedules to review each assigned manuscript and offer their professional expertise and recommendations for improvement of these published articles. Also, we like to take this opportunity to acknowledge the hard work of our support staffs at the IAFOR who were involved with the publication of this journal.

Please note that we are seeking manuscripts for our upcoming 2022 issues. Below is the link to the journal's web page for your attention; please review this web page to become familiar with the journal's objectives and the submission guidelines for authors:

<http://iafor.org/publications/iafor-journals/iafor-journal-of-psychology-and-the-behavioral-sciences/>

If you have any questions, please do not hesitate to contact us, otherwise please send your manuscript to the journal's editors below. Thank you for considering this invitation, and we look forward to hearing from you soon.

Best regards,
Journal Editors

Sharo Shafaie, PhDEmail: sshafaie@semo.edu**Deborah G. Wooldridge, PhD**Email: dgwoold@bgsu.edu*The IAFOR Journal of Psychology and the Behavioral Sciences*

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Conjugal Visits in Prisons Discourse: The Prisoners' Voice in Malawi

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Abstract

The issue of possible provision of prisoners' conjugal rights in jurisdictions not yet allowing them, such as Malawi, is still an intricate debate amongst the stakeholders. However, the most important stakeholder in the issue, the prisoner, is usually left out of the discourse. This study analyzed the perceptions of randomly sampled 305 prisoners on conjugal visits at one of the central prisons in Malawi. Both qualitative and quantitative data from prisoners' perceptions were collected and used concurrently. The key finding was that prisoners (male and female) in Malawi generally had positive perceptions regarding conjugal visits since more than 80% of the respondents (n=305) reported that conjugal visits were good and recommended their possible introduction in Malawi. These incarcerated persons opined that conjugal visits reduced problems of homosexuality, sexual assaults, physical violence in prisons, supporting prisoners' rehabilitation and reintegration efforts as well as helping prisoners in preserving and establishing family ties. Prisoners also viewed conjugal visits as another way of dealing with the HIV and AIDS problem in Malawi prisons. Though the potential challenge was reported to be its costs, it was opined that the programme was still worthy of introducing. It was therefore concluded that the prisoners' voice is also valuable in not only conjugal visits discourse but also in all issues related to law and policy that concern them.

Keywords: conjugal rights, conjugal visits, Malawi prisons, prisoners' perceptions

It is said that imprisonment is the most ancient and oldest penal institution (Goyal, 2018). Traditionally, incarceration was meant to be painful since it was meant to deprive the prisoner of many civil rights and privileges in addition to their liberty. Imprisonment was aimed at extracting retribution from the offenders and to deter the would-be ones (Durrant, 2013; Parkinson, 1997). However, it is now widely held that punishment-centered imprisonment does not usually work in reducing recidivism and even deterrence (Durrant, 2013; Useem & Piehl, 2008; Yates, 2012). Durrant (2013) argues that as much as many scholars would argue that the threat of imprisonment, in general, helps in the prevention of offending, there is a considerable doubt that imprisonment completely deters crime in the society. This is because the punitive strength of criminal sanctions is not sufficient enough to deter offenders. Instead, offenders are made hard-core criminals who are likely to be much more dangerous when they are released into their societies (Useem & Piehl, 2008).

Malawi was also not exceptional. In the past, the prison regime was punishment-oriented. Burton et al. (2005) observed that prison life was generally dehumanizing to inmates. It was engrossed on taking away their most basic freedoms and placing little emphasis on prisoners' well-being and health since they were perceived as deserving the prison hardships. That is why many court's sentences in Malawi included the phrase "imprisonment with hard labour". The 1994 revision of the Malawi Constitution was the genesis for the change. It was felt that the prison regime in Malawi needed a total paradigm change from punitive centeredness to the rehabilitation model. Section 163 of the constitution includes the rehabilitative function of the prison regime as it establishes the Malawi Prisons Service as an institution mandated to "house, detain and rehabilitate persons sentenced to imprisonment" (Republic of Malawi, 2017, p. 73). This is clearly expounded in the current mission of the institution which states that prison service is existing to provide for effective rehabilitation, reformation and community reintegration services to inmates as the service's contribution to public security and safety in the country (Malawi Prison Service [MPS], 2016). In line with this legal framework, Malawi prisons introduced numerous programs aimed at rehabilitation and reformation of prison inmates such as education, technical and vocational training, chaplaincy and religious services (Kajawo, 2019).

Nevertheless, many researchers still bemoan shortages of effective rehabilitation and reintegration activities or programming of prisoners in Malawi (Burton et al., 2005; Kajawo, 2019). It was found that many offenders are released from prisons without proper efforts by the prison service to rehabilitate and reconnect these people to their societies for effective reintegration processes. This is the main cause of high rates of recidivism in the country. According to some studies, offenders' continued connection and communication with their families and friends while serving their sentences enhances their chances of not reoffending after their release (Burton et al., 2005; Durrant, 2013; Kajawo, 2021). Interestingly, the Malawi Prisons Act has some provision that could help in enhancing the continued connection of prison inmates with their outside world through mails, telephones and regular visits (Burton et al., 2005). Additionally, this 1962 legislation incorporated a provision for the license to be at large only for prisoners serving life imprisonment. Section 110 provides that qualified life-sentenced inmates may be temporally released for a period to stay with their families to enhance their community reintegration. However, this provision is not currently operational for unknown reasons.

There is indeed a need for the prison service to devise many activities or programs that can enhance rehabilitation and reintegration processes of the incarcerated people. This is to provide for more opportunities for inmates to have a meaningful relationship with people in their

communities while serving their sentences to reduce the dehumanizing effects of imprisonment (Kajawo, 2021). Amongst these opportunities is the provision of conjugal visits to the incarcerated people which is not yet provided for in the current prisons legalizations in Malawi.

Conjugal Visits in Prisons

Conjugal visits in prisons are scheduled private meetings between inmates and their significant others, usually, their legal spouses and families during which they may engage in whatever legal activity they desire including sex (Hensley et al., 2002; Kajawo, 2021; Thompson & Loper, 2005; Einat & Rabinovitz, 2012; Wyatt, 2006). During this scheduled period, an inmate is allowed to spend several intimate hours or days with their visitor(s). To qualify for these visits, inmates are expected to meet certain requirements of which the standard ones are good conduct while serving their sentences and being legally married to the visiting spouse (Yakubu, 2018).

It is recorded that Mississippi State Penitentiary in Parchman was the first prison in the world to allow conjugal visits to prisoners as early as 1900 which were used as a motivation tool for prisoners' hard work and good conduct in the cotton plantations (Hopper, 1969; McElreath et al., 2016). In the 21st Century, at least six states in the USA and other countries such as Spain, France, Sweden and Denmark, Switzerland, Germany, Greece, Russia, Israel, Canada, Brazil, Philippines, Turkey and Belgium were reported to allow incarcerated people to enjoy conjugal visits in prisons (Carlson & Cervera, 1991; Deutsche Manipulationskunst, 2015; Einat & Rabinovitz, 2012; Hopper, 1989; Singh & Dasgupta, 2015; Smit & Dunker, 2001; Washington Department of Corrections, 2005; Wyatt, 2006; Yakubu, 2018). These included three African countries, namely; Kenya (Einat, 2017), Egypt (Shamel, 2004; Wyatt, 2006) and Tanzania (Presse, 2018; Rweyemamu, 2018). In Tanzania, the programme, which was announced in 2012, was eventually launched, but short-lived because the new political regime of the country directed an end to it in 2018 (Majaliwa, 2012; Presse, 2018; Rweyemamu, 2018).

In 2014, the Malawi Government established a special law commission to review the Malawi Prisons Act to align it with the dictates of the Malawi Constitution and other applicable international law and principles in the administration, governance and management of prisons and prisoners (Kajawo, 2021; Kitta, 2015). Amongst the issues that sparked a hot debate in the consultative meetings for this law review was the possibility of including conjugal visitation rights in the revised prisons legislation (Nzangaya, 2016; Magombo, 2016; Phiri, 2016). Some stakeholders embraced the idea since, according to them, had the potential of assisting in the rehabilitation and community reintegration of prison inmates. Phiri (2016) reports that stakeholders especially human rights activists indicated that providing conjugal visitations to well-behaved prisoners “would among other things help to preserve marriages, reduce HIV/AIDS prevalence and homosexuality cases in prisons” (para. 6). According to another activist, Malawi just needed to include prisoners' conjugal visits in the laws because the investigations showed that HIV was spreading very quickly in prisons partly because a huge number of inmates were involved in homosexuality practices (Nzangaya, 2016). However, another group of stakeholders were reported to have seriously opposed and ruled out the possibility of including conjugal rights of prisoners in the prisons legislations. This was mainly because prisons did not have proper facilities for conjugal visits (Magombo, 2016). To them, the issue of inclusion of conjugal rights in the prisons legislation was not a priority to the country since the contemporary pressing issue was overcrowding of prison facilities.

Statement of the Problem

Several studies on the perceptions or attitudes of key stakeholders on conjugal visitation rights in prisons have been conducted all over the world (e.g. Bennett, 1989; Carlson & Cervera, 1991; Duba, 2016; Goyal, 2018; Hensley et al. 2000; Hensley et al., 2002; Hopper, 1962; Hopper, 1969; Singh, & Dasgupta, 2015; Wyatt, 2006). Majority of these studies were done in jurisdictions in which conjugal visit programmes were already introduced and operational of which the majority are western countries, with very few African countries such as Egypt, Kenya and Ethiopia (Duba, 2016; Einat, T. & Rabinovitz, 2012; Shamel, 2004), hence rendering scarcity or dearth of research in jurisdictions in which conjugal visits were not yet allowed.

Specifically, there is a dearth in research on this topic in Africa since most of the African reports on conjugal visits are not based on empirical studies but merely news articles (e.g. Majaliwa, 2012; Mbewe, 2016; Mwangi, 2019; Phakathi, 2012; Rweyemamu, 2018; Sichone, 2019). Einat & Rabinovitz (2012) observe that even those studies done in other continents on attitude and views of inmates have been conducted solely in male prisons that give uncertainty in the applicability of their findings to female inmates (Einat & Rabinovitz, 2012; Krahn et al., 2020). Einat (2017) found gaps in the literature on how various stakeholders perceive the meanings, functions, and implications of conjugal visitation programmes in prisons that needed exploring. This is also more valuable in the jurisdiction in which conjugal visits are not yet offered in prisons. In Malawi, the special law commission for the review of prison legislation engaged only the prisons managers and other outside stakeholders in consultative meetings of which their reactions on prisoners' conjugal visits were mainly negative as reported in the news media (Kitta, 2015; Magombo, 2016; Nzangaya, 2016; Phiri, 2016). The most important stakeholder, the prisoner was not consulted, hence their views are not documented anywhere. Prisoners' perceptions are likely to be valuable on the issue.

Purpose of the Present Study

This study was aimed at analysing the perceptions of male and female prison inmates on conjugal visitation rights at one of the maximum (central) prisons in Malawi. The study was thus aimed at broadening the understanding of conjugal rights issues using a different approach. Rather than targeting inmates in jurisdictions in which conjugal rights are accessible, the study chose to analyse the opinions of incarcerated people in a country that is not yet allowing conjugal visits in their penitentiary facilities. The study was, therefore, guided by two research questions:

- What are the perceptions of incarcerated persons in Malawi on conjugal visits in prisons?
- What are the perceptions of the incarcerated persons on the benefits and disadvantages of conjugal visits in Malawian prison context?

Methodology

The study was undertaken at one of the maximum (central) prisons in Malawi using a descriptive survey research design. Malawi has 30 prison facilities of which five are categorized as maximum-security prisons, which are regional referral prisons that admit all categories of prisoners in terms of crimes committed and length of sentence. Both qualitative and quantitative data from prisoners' perceptions on conjugal visits in prisons were collected and used concurrently (Plano Clark and Creswell, 2015). The researcher used semi-structured

questionnaires with both close and open-ended questions to explore how incarcerated persons made meaning of the term “conjugal visits” and their perceptions on its potential and appropriateness in their facilities. Firstly, the researcher asked the respondents if they had any knowledge or had heard anything regarding conjugal visits before this study. This was followed by a request to explain what they knew or heard in brief about conjugal visits. The researcher then provided a brief explanation of what conjugal visits are about to the respondents to prepare them for the proceeding question items. The question items were intended to gather their general attitude and perceptions on the idea of conjugal visits and their views regarding their benefits and some of the challenges that are likely to be faced in a Malawian prison context.

Participants and Data Collection

The study involved 305 incarcerated persons at one of the central prisons in Malawi. During the time of the study, this prison was holding a total of 1,828 which included 40 females. The study randomly sampled 15.6% (285) of the total male inmates' population at the prison (N=1,788) and 50% (20) of the female inmates (N=40). The mean age of the participants was approximately 32.24 years and Standard Deviation was 7.98 since the age range was 18 to 76. Amongst the respondents, 227 (74.4%) were married, 65 (25.3%) were single and 13 (4.3%) were either divorced or widows. Incarcerated persons were considered as participants because they were the basic key stakeholder of the conjugal visits.” Seth (1892, p. 233) argues that every individual responds effectively when they are given opportunity to contribute to issues affecting them rather than just being “passively moulded by society according to its ideas, either of its own convenience or of his good” (p. 233). According to him, “...a man knows himself from the inside as it were” (p. 233) hence prisoners have a valuable voice and input in the conjugal rights debate. Therefore, the involvement of inmates in this study cannot be overemphasised. Data was generated from all participants using semi-structured questionnaires which contained both close and open-ended question items.

Procedure and Data Analysis

Approval to conduct this study at one of the central prisons in Malawi was sought and received from the Chief Commissioner of Malawi Prisons as well as from the officers' in-charge of those prisons and the participants. All participants were informed of the aim of the survey. Questionnaires included an area and a form on which all respondents were requested to give their consents to participate in the study by signing, being briefed in a language they could properly understand the content of the form as well as the purpose and procedure of the study. Data obtained from some close-ended questions were edited, coded, classified and analyzed descriptively with the help of the computer statistical software package, IBM SPSS version 22.0. The software helped in reporting associations between variables at the $P < 0.05$ level of significance as well as the computation of responses into frequencies and percentages. Qualitative data from open-ended questions were analyzed through content analysis and presented in narrative form with specific highlights on distinct themes.

Findings

This study examined respondents' prior knowledge of conjugal rights before being briefed on the subject. Their perceptions and attitudes towards the idea of conjugal visits in prisons were then generated and analysed.

Prior Knowledge and Perceptions of Respondents on Conjugal Visits in Prisons

The study sought to find out if the respondents had prior knowledge or had heard about conjugal visits before this study. According to Table 1, both male and female prisoners (83%) indicated that they did not have any knowledge and have never heard of the conjugal visits.

Table 1

Respondents' Prior Knowledge and General Perception Regarding Conjugal Visits

Characteristics	Male (n=285)		Female (n=20)		P-value
	Freq	%	Freq	%	
Have you ever heard about conjugal visits?					<.001
Yes	49	17.2	1	5.0	
No	235	82.5	19	95.0	
Neutral	1	0.4			
Do you think prisoners' conjugal visits are good?					<.001
Yes	235	82.5	16	80.0	
No	50	17.5	4	20.0	
Would you recommend the introduction of conjugal visits?					<.001
Yes	237	83.2	17	85.0	
No	48	16.8	3	15.0	

However, out of the 17% who indicated having prior knowledge of conjugal visits (50 inmates), only seven male respondents were able to describe what they knew about conjugal visits. According to a married 32-year-old male, a conjugal visit is *“an opportunity in which relatives of convicted persons come and chat with them in a closed room”*. Another 40-year-old married male wrote, *“It is a privilege given to inmates to chat with their spouses and children (family). They are given space and time to interact”*. Another prisoner (a 38-year-old married male) even indicated one of the essential conditions for prisoners' accessibility to conjugal visits *“Reformed or well-behaving prisoners are given a chance to have sex with their wives or husbands while they are in prison”*. It was interesting to also note that even some non-married respondents were aware of these standard conditions as two of them had this to say:

It's a visitation of prisoners' wives or husbands in prison where a prisoner and a spouse engage in sexual activities with their legally married spouses only given to those well-behaving prisoners (a single, 23 years old male)

A right exercised by an inmate to be visited by family members such as wife, husband, children, fiancé, fiancée, in a separate room in absence of the prison officers for a period of one to seven days – enjoying their family love (a single, 40 years old male)

This just showed that some prisoners were aware of the conjugal visits in prisons even though these visits were not yet accessible to them in Malawi. This was followed by a stage in which the researcher briefly oriented the respondents regarding conjugal visits; what they are and some general conditions and practices. After getting a glimpse of the idea of conjugal visits, more than 80% of respondents (n=305) reported that conjugal visits were good for prisoners and a similar percentage recommended their introduction at their prison as shown in Table 1.

According to a 22-year-old married male, provision of conjugal visits would be a very good practice because marriage is sacred in the eyes of God hence nothing needed to hinder its continuity including imprisonment. Comparing the perceptions based on marital status, it was

noted that 34% of single respondents (n=65) indicated “No” to the statement that conjugal visits were likely to be good, while only 13% (n=227) and 15% (n=13) married and divorced respectively indicated “No” to the same statement. This could be because of the respondents’ knowledge of the condition restricting the enjoyment of this privilege to only legally married individuals, hence many singles did not see it as a good thing since they were likely not to benefit from it.

Perceptions of Incarcerated Persons on the Benefits of Conjugal Visits in Prisons

Both male and female prisoners (more than 80%) agreed that conjugal visits are likely to be beneficial to incarcerated persons and even prison systems as illustrated in Table 2.

Table 2

Respondents’ Perceptions on Benefits of Conjugal Visits

Characteristics	Male (n=285)		Female (n=20)		P-value
	<i>Freq</i>	%	<i>Freq</i>	%	
Conjugal visits would...					
reduce the problems of homosexuality and sexual assaults in prison					<.001
Agree	245	86.0	14	70.0	
Disagree	40	14.0	6	30.0	
reduce physical violence in prisons					<.001
Agree	234	82.1	14	70.0	
Disagree	51	17.9	6	30.0	
help in reforming the behaviour of inmates in prisons					<.001
Agree	232	81.4	14	70.0	
Disagree	53	18.6	6	30.0	
help in establishing ties with their families					<.001
Agree	263	92.3	17	85.0	
Disagree	22	7.7	3	15.0	

It was noted in the open-ended responses/discourses that many incarcerated persons recommended conjugal visits practice because of its potential to preserve and enhance family or marriage ties.

Can help us to have the peace of the mind and can enhance the good relationships with our loved ones and children hence giving them hope that we are still together, and we will be together (24-year-old, married male);

Most of the prisoners’ wives get married just because they cannot stand the long wait while their husbands are in prison. So, they find someone who might satisfy their sexual needs as she is also human she has feelings (23-year-old, single male);

When one is in prison, a lot of anxiety comes when he is thinking of the health of the loved ones. The spouse can remarry or start living a reckless life when they are not allowed to have sex with their loved ones in prisons. But all this might be reduced. The spouse will not get tempted to sleep with other people and get infected (31-year-old, married male).

Even the female inmates were able to present their deep feelings regarding the likelihood of conjugal visits strengthening family relationships.

We too are humans, we have sexual feelings, this programme can help (37-year-old, married female);

We miss our husbands all times. Being given this private time would be good because you can have time to discuss some important family issues that would help in maintaining marriages (35-year-old, married female);

I am imprisoned together with my husband. But we don't have a chance to be together. This can bridge this gap (24-year-old, married female).

Apart from enhancing family ties and other benefits which were indicated, it was also noted that many respondents felt that conjugal visits programme was another way of combating or fighting the HIV and AIDS pandemic.

Can reduce sexually transmitted infections among married people and promote bonding between parents and children (35-year-old, divorced female);

...it will give prisoners chances to chat freely with their families and will reduce homosexuality which is spreading HIV and AIDS and it is also putting many lives at risk (40-year-old, married male).

From many of the respondents' narratives, it showed that incarcerated persons in jurisdictions in which conjugal visits were not yet introduced also felt strongly that these kinds of privileges were a good way to go for prison facilities in their rehabilitation, reformation and reintegration processes.

The Respondents' Perceptions on the Disadvantages of Conjugal Visits

Since every coin has two sides, this study was also interested to gather the perceptions of the respondents on some challenges and disadvantages that conjugal visits are likely to have in Malawian prison facilities context as illustrated in Table 3.

Table 3

Respondents' Perceptions on Likely Challenges or Disadvantages of Conjugal Visits

Characteristics	Male (n=285)		Female (n=20)		P-value
	Freq	%	Freq	%	
Conjugal visits would...					
encourage one-parent family system					<.001
Agree	115	40.4	12	60.0	
Disagree	170	59.6	8	40.0	
be costly and expensive					<.001
Agree	118	41.4	7	35.0	
Disagree	167	58.6	13	65.0	
make single prisoners feel discriminated against					<.001
Agree	107	37.5	12	60.0	
Disagree	178	62.5	8	40.0	
likely to be prone to abuse by both prisoners and prison staff					<.001
Agree	151	53.0	7	35.0	
Disagree	134	47.0	13	65.0	

It was noted that there were statistically significant differences in the responses between males and females regarding three statements out of four. The only statement which the responses

were not statistically different was regarding whether conjugal visits programme was likely to be costly and expensive to the government. The perceptions of the female respondents closely paralleled those of their male counterparts since 41% of males and 35% of females agreed to the statement though most of both male and female respondents added in their narrative that the costs were worth the potential positive outcomes the programme was likely to produce.

But on the remaining three statements, it was noted that female respondents indicated that conjugal visits were likely to encourage one-parent family system (60% as compared to 40% of their male counterparts) as well as make single prisoners feel discriminated against (60% as compared to 37.5% of the male respondents). However, for the statement that the programme was likely to be prone for abuse, it was the male respondents (53%) who agreed to the statement as compared to only 35% of their female counterpart. These incongruities speak volumes regarding the gender-related differences in perceptions. Comparing the perceptions based on marital statuses, it was interesting to note that the majority (57%) of single respondents (n=65) agreed to the statement “conjugal visits would likely make single prisoners feel discriminated against” as compared to only 34% (n=227) and 38% (n=13) of the married and divorced respondents who also reacted positively to the statement.

In their qualitative narratives, it was noted that there was another group of respondents subscribing to a different school of thought regarding issues of HIV & AIDS and conjugal visits. Four respondents explained that access to conjugal visits might exacerbate the HIV and AIDS situation and the spread of other sexually transmitted infections in prisons. This is what two of them had to say:

Not good to introduce since can contribute to the spread of HIV since most of the prisoners' wives are prostitutes] (36-year-old, married male);

This can make inmates have sexual intercourse with arranged prostitutes and this will cause the spread of HIV/AIDS in prisons (26-year-old, married male).

Other respondents also added that conjugal visits were likely to lessen the pains of imprisonment hence encourage recidivism. According to a 40 years-old married male, “*This can promote more crimes in the country since prisoners may not feel the pains of imprisonment since they will not be missing their families*”. Another respondent also opined that conjugal visits might contribute to high rates of escapes in prison facilities when the prisoners are emotionally affected by those meetings “*...some prisoners might be disturbed by disagreements that might arise with their spouses during these visits hence encouraging escapes*”, while another felt that the mere availability of these kinds of privileges might trigger sexual desire in prisoners “*...this might trigger sexual desires in us*”. This just shows that incarcerated persons have a lot of things to contribute towards laws and policies that concern them, hence engaging them is always pivotal.

Discussion

From the results of this study, it can be concluded that people incarcerated in jurisdictions where conjugal visits programmes are not yet provided generally have similar positive attitude and perception regarding conjugal visits just as their counterparts in the jurisdiction in which they are accessible. In this study, more than 80% of the respondents (n=305) reported that conjugal visits were good and recommended their possible introduction at the facility. These findings generally correlate with similar findings of prisoners' perceptions on conjugal visits

in countries where their laws allow such visits (Einat, 2017; Krahn et al., 2020; Hensley et al., 2000). The slight differences amongst respondents based on marital statuses on percentages of respondents who indicated “No” to the statement that conjugal visits were likely to be good (34% of single, 13% of married, and 15% of divorced) could be attributed to the respondents’ knowledge that only legally married individuals were the ones likely to enjoy this privilege. Therefore, many singles did not see it as a good thing since were likely not to benefit from it.

The findings on the benefits of conjugal visits also correlate with the general findings of the studies done elsewhere that many groups of people including prisoners, prison officers and spouses viewed conjugal visits as capable of reducing problems of homosexuality and sexual assaults (Einat & Chen, 2012; Hopper, 1989; Kajawo, 2021; Knowles, 1999; Wyatt, 2006), reducing physical violence (Knowles, 1999), supporting rehabilitation and reintegration efforts (Carlson & Cervera, 1991; Einat & Rabinovitz, 2012; Robertson, 2003), and helping and providing opportunities to incarcerated persons to preserve and establish family ties (Hensley et al., 2000; Hensley et al., 2002; Krahn et al., 2020; Kent, 1975; McElreath et al., 2016; Wyatt, 2006). From the open-ended discourses, apart from enhancing family ties and other benefits which were indicated, it was also noted that many respondents felt that conjugal visits programme was another way of combating or fighting the HIV and AIDS pandemic in prisons. This was through the reduction of prison homosexuality; concurring with the views of other stakeholders who were involved in the 2016 consultative meetings (Nzangaya, 2016). But another group felt that the same conjugal visits might exacerbate the HIV and AIDS situation and the spread of other sexually transmitted infections in prisons contacted from the spouses from outside, just as it was also observed by Einat (2017).

The study also revealed that some incarcerated persons felt that the programme was likely to face some challenges or have some disadvantages in a Malawian prison context. It was found that both male and female respondents had closely parallel positive perceptions (41% of males and 35% of females) that conjugal visits programme could be expensive to the government hence increasing the chances of not being considered for introduction. This concurs with other scholars who argued that the process of reviewing the prison laws to create room for conjugal rights as well as the construction of proper infrastructure is likely to be costly and expensive especially in developing countries (Goyal, 2018; Kajawo, 2021; Singh & Dasgupta, 2015; Yakubu, 2018). Nonetheless, many of the respondents of this study still defended the costs since, according to them, were worthy of the benefits potentially expected from such a programme.

The incongruities between male and female respondents on the remaining three statements regarding conjugal visits’ effects on the family system, its discriminatory condition against unmarried persons and its likely prone to abuse speak volumes regarding the gender-related differences in perceptions. This is because women were likely to feel more negative on the possibility of single-parenting than men since child care is usually stereotypically considered feminine activity (Marks et al., 2009). Moreover, men are expected to react more strongly to perceived distributive and procedural justice than women hence more sensitive to possible abuse of the programme (Foley et al., 2005; Gilligan, 1982). On the same note, the differences in the perceptions based on marital statuses in which the majority (57%) of the unmarried respondents (n=65) agreed to the statement that “conjugal visits would likely make unmarried prisoners feel discriminated against” as compared to only 34% (n=227) and 38% (n=13) of the married and divorced respondents respectively pointed to the fact that many unmarried prisoners did not feel any need to have the programme than the married and divorced ones.

These findings agreed with many studies (Burton et al., 2005; Einat, 2017; Goyal, 2018; Murray, 2005; Singh & Dasgupta, 2015). Goyal (2018) argues that conjugal visits might result in procreation which contributes to one-parent family systems. Burton et al. (2005) argue that children from single-parent homes are likely to be at a high risk of turning to crime due to a lack of suitable role-models. They are also likely to experience many psychological problems than those from two-parent homes (Murray, 2005). Commenting on likely abuse of the programme, Singh and Dasgupta (2015) argue that the possibility of corruption creeping in cannot be ignored especially in most developing countries where prison officers are often underpaid.

This study just revealed that incarcerated persons have a lot of things to contribute towards laws and policies that concern them, hence engaging them as one of the key stakeholders would always be valuable. It is an undeniable though the unfortunate fact that prison reforms have not been the society's priorities in many African countries. Though there have been some little developments in improving the lives of prisoners in Malawi since the Constitutional Court case of 2009 of *Gable Masangano v Attorney General & Others*, it is still far from satisfactory. That is why the issue of the possible introduction of conjugal visits in Malawi prisons aroused an intricate debate. Just like in other social debates such as gay-rights and abortion laws, there is also a need for an engagement of intellectual debate on issues of conjugal rights of prisoners. There is no need to continue "hiding beneath our moral cover" (Singh & Dasgupta, 2015, p. 88).

Implications for Prison Policy and Practice

The findings of the study have several implications for prison policy and practice. Prisons need to put more emphasis on the humane aspect of an individual. Burton et al. (2005) observe that the Malawi Constitution entitles prisoners to the rights to humane conditions of detention, dignity, privacy and the right to communication and visitation. This is because contact with the outside world can also assist in their rehabilitation processes. It is important to understand that a prisoner does not cease to be a human being when incarcerated hence they do not lose their sexuality (Singh & Dasgupta, 2015). Therefore, it would be irrational to expect that prisoners check their sexuality at the prison gate. The society needed to take heed of many prisoners' plea to be allowed to satisfy their sexual needs to enable them to maintain ties with their spouses thereby also alleviating the homosexuality problem in prisons. In the words of Kaufman (1960), a prison regime that separates a man "...from his family in such a way that he is unable to enjoy periodic sexual satisfaction [conjugal visits] ..." is inhumane and barbaric (p. 52). The society should not just rigidly focus on blind desire for justice and unreasonable spirit of vindictiveness since it can "afford to be...generous as well" to its incarcerated people (Seth, 1892, p. 233). Denying conjugal visit without proper reasons or justifications is subjecting even the innocent family members outside prison walls to punishment as well.

Regarding the possible costs of introducing conjugal visits programme, Malawi and other African countries needed to reconsider their stands on the issue. The expensiveness of the programme should not be considered as an excuse for not introducing it since good things are not always cheap or free (Kajawo, 2021; Magombo, 2016; Nzangaya, 2016). Even in the case of Mississippi, McElreath et al. (2016) noted that the economic reason which was cited for ending conjugal visits was just a scapegoat which was not even close to the main reason. According to them, the main reason was the conflict in the competing prison philosophies; between rehabilitation and punishment. Politicians and courts opted for punishment philosophy hence guiding the policy direction (Sanburn, 2014). But Malawi has embraced rehabilitation

philosophy hence these kinds of programmes are important. As a matter of fact, most of the costs attached to the programme are likely to be in the initial phase, such as construction and furnishing of special rooms for these visits. Malawi needed to just engage the first step by introducing these visits in its legislations. The government can then work with non-governmental organisations in constructing those facilities.

Limitations of the Study

This study had one main limitation. The study was initially planned to include spouses of prisoners. But they were left out due to the inability to contact them because of the COVID-19 pandemic restrictions. Their inclusion would have enhanced the value of this study since the desirability of conjugal visits ought to be a question that should also be answered by the prisoner's spouse since conjugal rights become to be their civil rights (Schneller, 1976). Nevertheless, the involvement of prisoners was still valuable as has still informed the study, though the inclusion of prisoners' spouses is strongly recommended in future studies.

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Fiction Reading and Empathy Capacity of Selected Filipino Adolescents and Young Adults

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Abstract

This study aimed to discover if adolescents' and young adults' empathy capacity is higher when they engage more in fiction reading. A total of 301 students, aged 16-22, completed a self-administered questionnaire. More than half (56%) of the respondents consider reading as a hobby with books as the preferred reading material. Around 38% have moderate fiction reading scores and around 77% have high empathy capacity scores. Findings showed that the older the respondent is, the less likely they would read fiction and the lower their empathy level. Females are more likely to read fiction and are more empathic than males. Also, results revealed that the more the individual reads fiction, the more empathic they can become. Home and school interventions can be created to increase opportunities and desire for reading fiction and enhancing empathy capacity.

Keywords: adolescents, empathy, fiction reading, young adults

Empathy in Adolescence and Young Adulthood

Adolescence occurs approximately from 10-22 years old (Steinberg, 2016) and is the life phase that continues until adulthood. Changes in this stage result in bigger physiques and sexual development, and other advances in the cognitive, social, and emotional domains (Berk, 2014). Prosocial behaviors such as empathy also advance in development over the course of this life stage. Adolescents would start to demonstrate prosocial behaviors that do not only benefit them but also promote true acts of empathy which benefit others (Steinberg, 2016). Empathy is one's capacity to understand the feelings of others and share their emotions or to feel with someone (Singer & Klimecki, 2014). Further, it is presented as a "multidimensional construct" and "behavioral competency" which includes cognitive (i.e. perception and understanding) and affective (i.e. feelings) components (Derntl et al., 2010). It is crucial to group communication, participation in social life, formation of meaningful bonds, internalization of rules, and motivator for helping behaviors (Levy et al., 2019; Klimecki, 2019; McDonald & Messinger, 2013).

Schikedanz et al. (2001) said that empathy can be developed as early as eighteen months old. At this age, the infant does not understand the psychological condition of the person s/he is empathizing with but is empathically stimulated. As the child grows older, s/he would start to recognize other's psychological states through personal experiences and insights on what another may be feeling. Empathy continues to develop into the adolescent years (Berk, 2014; Mc Donald & Messinger, 2013). The empathy development of 14–16-year-olds is higher compared to their younger counterparts (Allemand et al., 2015). Similarly, Brouns et al. (2013) found that empathy increases as age increases based on their study of 16–19-year-olds. Gruhn et al. (2008) found that the empathy self-reports of 15–24-year-olds were higher than older adults.

In terms of sex, females were found to be more empathic than males (Allemand et al., 2015; Brouns et al., 2013) or have higher ratings of empathy in self-report surveys (Derntl et al., 2010). On the other hand, Gruhn et al. (2008) found no sex differences on empathy self-reports.

Meditation-based techniques, such as mindfulness meditation and loving kindness training, have arisen to enhance social emotions like compassion and empathy (Singer & Klimecki, 2014; Klimecki, 2019). Aside from these, other researchers (Mention some of these researchers) have also seen the potential of reading fiction to enhance these social emotions. Rowe (2018) suggests that specific fiction titles in library collections and guided discussions can help increase empathy through the processes of identification and transportation/emotional immersion.

Fiction Reading and Empathy

Reading fiction means understanding written or printed stories that are the expression of the author's imagination (Kurland, 2000). People read fiction to gain new information, be entertained, and experience the feelings and ideas part of the story. Recreational reading, though not always through fiction, can increase literature understanding, improve grammar and spelling (Gallick, 1999 as cited in Schikedanz et al., 2001). Adolescents increase their ability of recalling and analyzing literature as they increase in age (Schikedanz et al., 2001), however, males were found to be average or poor readers, read fewer classical stories willingly, and spend less time reading (European Commission, 2008 as cited in Uusen & Mürsepp, 2012). Oatley (2016), in his review of the effects of fiction, concluded that reading fiction improves empathy. This happens through an engagement in understanding another's mind and

experiences such as the fictional characters' (Bal & Veltkamp, 2013). The reader places himself in another's situation to explore people's lives and events which have happened and may happen (Altmann et al., 2014). Kidd and Castano (2013) found from their study that fiction readers had higher empathy scores than those who read non-fiction or popular fiction. They explained that with literary fiction, the character's interior lives are portrayed, and the readers explore the character's emotions and motivations. Similarly, Mar (2014) found that fiction reading enhances social abilities and that greater immersion in a story predicted higher empathy levels.

This study aims to determine whether the empathy level of adolescents who read more fiction is higher compared to those who do not. Stansfield and Bunce (2014) found that reading fiction specifically enhances cognitive empathy or the ability to understand another person's perspective. Reading fiction activities may be an avenue for intervention in increasing empathy capacity. Further, past studies were done on young adults in developed countries. No study was found to have been done on adolescents and young adults in the Philippine setting. Specifically, the study aimed to answer the following questions:

1. Do demographic factors (age, sex) predict the levels of fiction reading and empathy among adolescents and young adults?
2. What is the impact of fiction reading on adolescent and young adults' empathy capacity?

Findings of this study may be significant to society since empathy is beneficial for relationships with different individuals across various settings (Klimecki, 2019). Enhancing empathy in adolescents is important for social competence and reading fiction could be an opportunity to do that at this stage. The results may also encourage academic institutions, media, or even family units to promote reading fiction materials early in life to increase empathy for the well-being of individuals.

Methodology

This is a mixed-methods study using the cross-sectional design. All the data was gathered at one point in time. The final sample size of 301 consisted of 114 male students and 187 female students. The respondents were selected from 418 students from three general education courses who come from various degree programs of the university. They were selected through proportional stratified random sampling by separating the population [male=158 and female=260] by sex or into two strata for equal representation. With a sampling fraction of 72/100, using a 95% confidence interval and a margin of error of 3, the final sample size was computed. A draw-lots method was conducted to randomly choose the respondents from the list. The age range within this sample is 16-22 years old.

A questionnaire with four parts was used. The first part gathered socio-demographic characteristics [i.e. age, sex]. The second part is the Basic Empathy Scale (BES) of Jolliffe and Farrington (2006). It has 20 items with a 9-point scoring system (Mehrabian & Epstein, 1972), using -4 [exceedingly unlike me] to +4 [exceedingly like me]. Negative items are reversely scored, and items are summed up to obtain a scales core. Positive 80 points is the highest possible score while -80 points is the lowest. The higher the score, the higher the empathy level. The third part is the Fiction Reading Scale (FRS) with 16 items centered on the amount of fiction read, time spent reading, interest, and emotional transportation derived from Stansfield and Bunce (2014) with question ideas from Fitzgerald (2014). It also used the 9-

point scoring system (Mehrabian & Epstein, 1972) with possible scores of -64 to +64. The higher the score, the higher the level of reading fiction. The fourth part is the population characteristic survey based on one's preference of reading as a hobby, their preference of fiction or non-fiction material, and the medium used in reading such as actual books or Kindle. The questionnaire was pretested to college students. The outcome of the Cronbach's Alpha was $\alpha=0.766$ for BES and $\alpha=0.870$ for FRS, which indicates a good degree of consistency. For face validity, the content of the questionnaire was examined by three experts, two on adolescent development and one on literature.

The permission of the lecturers and the informed consent of the respondents were requested. Upon approval, the respondents accomplished the questionnaire after class hours in the lecture halls or were brought back during the next class. After this survey, four high scorers and four low scorers underwent an in-depth interview to further describe reading fiction's effect on their empathy experiences.

Descriptive measures were used to present age, sex, reading preferences, and the scale scores. Normality testing proved that the data is not approximately normally distributed. Thus, nonparametric tests were used. The impact of age on reading fiction and empathy level was analyzed using Kendall's Rank Correlation while Mann-Whitney U test was used to investigate the impact of sex on reading fiction and empathy level. For both age and sex, Nonparametric Linear Regression was used. Both Kendall's Rank Correlation Analysis and Nonparametric Linear Regression were used to determine the relationship of reading fiction and empathy. Qualitative analysis of data from the in-depth interview was done to see the underlying themes of the adolescents' responses.

Results

Age & Sex of Respondents

Table 1 shows the age and sex distribution of the respondents. Nearly a third were 18 years old and more than half were females.

Table 1

Frequency and Percentage Distribution of Age and Sex of the Respondents (n=301)

Characteristics	Frequency	Percentage
Age		
16	4	1.30%
17	71	23.60%
18	93	30.90%
19	76	25.30%
20	41	13.60%
21	12	4.00%
22	4	1.30%
Sex		
Female	187	62.10%
Male	114	37.90%

Reading Fiction (RF) Level of Respondents

More than a third of the respondents belong to the moderate level (Table 2). The average reading fiction score was -6.113 (SD= 35.073) which belongs to this level.

Table 2

Fiction Reading Level of the Respondents (n=301)

Levels	Frequency	Percentage
High (23 to 64)	77	25.60%
Moderate (-22 to 22)	114	37.90%
Low (-64 to -23)	110	36.50%

When those who indicated that reading is a hobby were asked about their reading preferences, 45% stated that they preferred fiction, 44% preferred both fiction and non-fiction, and 11% preferred non-fiction.

The most preferred medium in reading is actual books followed by the android phone (Table 3).

Table 3

Preferred Medium of Reading of Respondents

Medium	Frequency	Percentage
Actual books	248	82.40%
Android phone	101	33.60%
Android tablet	49	14.60%
Kindle	15	5.00%
Laptop/personal computer	7	2.30%
Printed copies (pdf, handouts)	1	0.30%

*multiple responses

Empathy Level of the Respondents

More than three-fourths of the respondents had a high empathy level (Table 4). The average empathy score is 45.635 (SD= 25.895) which belongs to the high level.

Table 4

Empathy Level of the Respondents (n=301)

Levels	Frequency	Percentage
High (27 to 80)	231	76.70%
Moderate (-28 to 26)	69	22.90%
Low (-80 to -27)	1	0.30%

Effect of Age on Reading Fiction of Respondents

The rank correlation of age and reading fiction level resulted as $\tau_b = -0.116665$ which shows a very weak negative relationship. However, their relationship is significant at $\alpha = 0.0081 < 0.0500$. As age increases, reading fiction decreases.

The non-parametric regression analysis showed that, with a 95% level of confidence, the real value of the slope of the linear regression line for age and reading fiction near -8 to -4. The formula here can be estimated as $y = 78.4 + (-4.8)x$. Thus, age affects reading fiction.

Effect of Age on Empathy Level of Respondents

The rank correlation of age and empathy level shows a very weak relationship with $\tau_b = -0.093595$. Their relationship is significant at $\alpha = 0.0361 < 0.0500$. As age increases, empathy level decreases.

The non-parametric regression analysis showed that with a 95% confidence, the real value of the slope of the linear regression line for age and empathy level is around -4 to 0. The formula here can be estimated as $y = 84 + (-2)x$. Thus, age affects empathy level.

Effect of Sex on Reading Fiction of Respondents

There is a relationship between sex and reading fiction with a z value $= -5.934$. The relationship is significant at $\alpha = 0.000 < 0.050$. The mean rank of RF scores of males is 112.96 while that of the females is 174.19. The females have higher RF scores than the males. Also, in this study, more females (74.1%) consider reading as a hobby and they read fiction and non-fiction materials.

Effect of Sex on Empathy Level of Respondents

There is a relationship between sex and empathy level with a z value $= -5.488$. The relationship is significant at $\alpha = 0.000 < 0.050$. The mean rank of empathy scores of males is 115.93 while that of the females is 172.38. The females have higher empathy scores than the males.

Effect of Reading Fiction on Empathy Level of Respondents

The rank correlation of reading fiction and empathy level shows a very weak positive relationship with $\tau_b = 0.147176$. Their relationship is significant at $\alpha = 0.0004 < 0.0500$. As reading fiction increases, empathy level increases.

The non-parametric regression analysis showed that with a 95% confidence, the real value of the slope of the linear regression line for reading fiction and empathy level is near 0.1 to 0.153846. The formula here can be estimated as $y = 49 + (0.125)x$. Thus, reading fiction affects empathy level.

Discussion

Reading Fiction (RF) Level of Respondents

More than a third of the respondents belong to the moderate level. Uusen and Mürsepp (2012) found that among their adolescent respondents, there were 45% who are “good readers”, 39% are “average readers” and 15% are “bad readers/don’t like reading at all”. More respondents in this study have moderate RF scores. It may be that the level/scale rating for this study came from quantitative analysis while that of Uusen and Mürsepp’s (2012) is qualitative and their respondents were younger at 15 years old.

Despite the moderate RF level of most respondents, 56% of the respondents stated that reading is a hobby for them. Gleed (2013) found that 21% of the high readers in his study loved to read and considered it as a hobby. Perhaps, being college students makes them love reading not only for academic purposes but also as a leisure activity. This is not surprising since one of the reasons given by respondents who have reading as a hobby is because reading is a way of learning. Other reasons they stated were reading improves one's vocabulary, it is a way of escape, it is interesting, it is a way of communicating with the world, and it is already a habit from childhood. Gleed (2013) stated that some of the high readers in his study grew up in houses with available books and had parents who encouraged them to read.

Those who do not consider reading as a hobby and had low RF scores reasoned that they had no good books, no time, and were not interested. Gleed (2013) also observed these reasons from the low readers in his study. Based on the in-depth interviews done in this study, those who have high RF scores read 7-10 times a week while those who have low RF scores only read 1-2 times a week. The readers made time for reading.

There were as many respondents who preferred fiction reading as both fiction and non-fiction reading. Gleed (2013) also observed that his respondents preferred fiction (26%) slightly more than non-fiction (22%). The National Library Board of Singapore (2016) found that fiction reading (93%) was lower than non-fiction reading (98%). More recently, Loan and Shah (2017) found that fiction was the most preferred literature genre among public high school students in India. Based on the interviews, the fiction readers said they preferred fiction due to it being imaginative, creative, and entertaining. Similarly, other adolescents said that it is a means of entertainment and escape and that it may offer scenarios which can be applied to real life (National Library Board, 2016).

Reading actual books remains to be the most preferred medium (Loan & Shah, 2017; National Library Board, 2016; Gleed, 2013). Based on the interviews in this study, most respondents liked actual books better since these have inherent value, are affordable in paperback versions, and because gadget screens are straining and hurtful to the eyes due to blue light emission.

Empathy Level of the Respondents

More than three-fourths of the respondents had a high empathy level. Allemand et al. (2015) discovered relatively high degrees of stability in empathy among adolescents, aged 12-16, within the per year stability correlations. Empathy increased during adolescence. Further, adolescent empathy predicted the following outcomes two decades later at age 35: adult empathy, communication skills, social integration, relationship satisfaction, and conflicts in relationships. Van der Graaff et al. (2014) found that adolescents, generally, show an increase in two kinds of empathy: cognitive empathy (the ability to understand another's perspective) and affective empathy (the ability to recognize other's emotions and respond to these). Possible reasons for this could be greater social networks and interactions and higher cognitive abilities with the development of the prefrontal cortex. This brain region is significant for social cognition and helps adolescents think about how their actions can affect their lives and other people.

Effect of Age on Reading Fiction of Respondents

Age and reading fiction have a significant relationship. The findings contradict the results of Stansfield and Bunce (2014) where age has a significantly positively relationship with fiction exposure. This observed decline in reading fiction could be due to the presence of other activities which are also interesting and entertaining such as video games, watching movies at

home, sports activities, and social media connections via the Internet (Ingraham, 2016; Denby, 2016).

Age also has an impact on reading fiction. The number of respondents in this study who considers reading a hobby started to decline at age 18-22 from 33.5% to 1.2%. Those who prefer fiction also declined from 32.9% to 1.3% from age 18-22. More than half of the interviewees [5 of 8] think that age may have nothing to do with reading fiction but by the way one is brought up or with the personal interests of the individual. They think that some older people more likely prefer non-fiction to know more about reality while adolescents read fiction more because they like discovering new things about the world and are trying to explore and establish their self-identity.

Effect of Age on Empathy Level of Respondents

Age influences empathy level. Much as there are studies which show otherwise (Allemand et al., 2015; Van der Graaff et al., 2014), Oh et al. (2020) found through their longitudinal study that empathy increases with age. They suggest that in adolescence and early adulthood, bigger social networks and even, traveling may widen one's perspectives about people and contexts, leading to increases in empathy. Sun et al. (2018) found that cognitive empathy decreases but affective empathy increases over the lifespan. This is due to a neural mechanism which may give rise to different developmental trajectories for these two empathy types. Further, psychological mechanisms such as the perspective taking, empathic accuracy, compassion and personal distress may also influence empathy (Beadle & De la Vega, 2019).

All who were interviewed perceived that age influences empathy. A 17-year-old female said that it is due to them knowing "what's happening about the world around them." A 19-year-old male said that it is "due to the accumulated experiences that guide older people."

Effect of Sex on Reading Fiction of Respondents

Sex and reading fiction have a significant association. Linnakylä (2000 as cited in Uusen & Mürsepp, 2012) observed that out of 53% of pupils aged 15 in Finland who said that they read fiction a couple of times in a month, there were 41% of females and 12% of males in the group. The National Library Board (2016) saw this trend too with more females reading fiction, particularly, mysteries and thrillers followed by romance and love stories. In a more recent study, Loan and Shah (2017) found that females have a higher preference for fiction than the males with more of the females preferring romance and poetry while the males preferred crime and horror fiction.

Among those interviewed in this study, only two perceived that there are more girls who read fiction but the rest suggested that reading fiction may also depend on the way one is brought up or on the personal interests of the individual.

Effect of Sex on Empathy Level of Respondents

There is a sex difference for empathy with females manifesting higher empathy levels. In earlier studies, Whalen (2010) found that females scored higher than males on empathy and its four dimensions: personal distress, perspective taking, fantasy and empathic concern. Sharafat and Zubair (2013) discovered that females showed more affective empathy, emotional responsiveness, and susceptibility to emotional contagion than males. Van der Graaff et al. (2014) found that cognitive empathy rises steadily in girls starting at age 13 but that males only start manifesting this by age 15. This was attributed to emerging cognitive abilities due to neural maturation. Affective empathy among female adolescents is high and quite stable in this

stage while males show a temporary decline between ages 13-16 most likely due to increased testosterone levels brought about by pubertal changes (Stuijzand et al., 2016). Aside from these explanations, sex differences in empathy levels may also be due to the gender role intensification theory (Hill & Lynch, 1983 as cited in Van der Graaff, 2014) or the greater expectations of society and social groups that males and females act accordingly with gender role expectations of strength, softness, expressiveness, and the like.

In a more recent study, Stuijzand et al. (2016) found that female adolescents manifested higher empathy in a cross-sectional study and that female adolescents showed higher empathy over time in a longitudinal study although empathy also increased among the males. The increase was attributed to the development of peer and romantic relationships in this stage which may heighten the showing of empathy during interactions.

All of those who were interviewed agreed that sex influences empathy with 7 out of 8 saying that they perceive females as more empathic. A 17-year-old male said that this may happen because “it is stereotypical for males to be tough while females are expected to be more caring and understanding.” A 19-year-old female said that “females are more empathic because they seem to listen more and are more expressive by nature.”

Effect of Reading Fiction on Empathy Level of Respondents

Reading fiction influences empathy level. Reading fiction stories was found to determine emotions of individuals (Djikic et al., 2009) and physical sensations (Berns et al., 2013). Stansfield and Bunce (2014) also found a causal relationship for empathy capability and reading fiction. Kidd and Castano (2013) found that literary fiction readers had higher empathy scores than those who read non-fiction or popular fiction genres.

Bal and Veltkamp (2013) and Johnson (2012) point to the connection of “emotional transportation” or being emotionally involved in reading fiction with empathy level. Readers focus on the story and become immersed in this narrative world for the duration of the reading. With fiction, the character’s thoughts and emotions are depicted with an openness to the reader’s interpretations and the readers explore and may extend the character’s emotions and motivations. The readers may identify with the characters and become emotionally involved with them or respond to them especially, as both fortunate and unfortunate events happen to the characters (Kidd & Castano, 2013; Mar et al., 2009). In a later study, Mar (2014) found that greater immersion in a fiction story predicted higher empathy levels and that social emotions are enhanced with reading fiction. As readers try to understand the thoughts and emotions of the characters, they can widen their perspectives about humans and social interactions in various contexts and cultures. Readers may integrate into their self-concepts a caring character and empathic behaviors in their daily life.

In the interviews, half of the respondents agreed that reading fiction can affect their empathy level since they can relate to the characters and can learn many things from the storyline the characters experience. A 17-year-old female said that this is “because I learn many things from reading.” A 20-year-old male said that “if one reads, one can relate more to the characters as well as real people.”

The other half said that reading fiction may affect empathy if the reader can relate with the story’s protagonist(s) or absorb the character’s feelings problems, and conditions. A 17-year-old female said that “it depends if you absorb the feeling of the characters enough as your own to affect your real life.” Also, a 21-year-old male said that “it depends on what a person is

reading, thoughts of the fiction characters, and whether or not, you are able to process what you are reading, enough to apply it in your real life.”

Implications

The results of this study indicate that age has an effect on reading fiction and empathy, there are sex differences in reading fiction and empathy, and reading fiction predicts empathy levels. What cannot be deduced from this study are possible mediating factors between reading fiction and empathy. Bal and Veltkamp (2013) and Johnson (2012) point to the role of emotional transportation or immersion in the narrative while reading. This could be considered as a separate variable in future research as related to reading fiction, cognitive and affective empathy or its accepted components, and gender differences.

To take the results further, it is recommended that early adolescents along with emerging adults be included to investigate developmental trends in reading fiction and empathy in a wider sample. The fiction reading scale in the questionnaire can explore more about the type of fiction read, fiction sources, and the media forms of fiction.

Fortunately, in the Philippines, Literature is a required subject throughout secondary education. Educational institutions can use Literature as an avenue to highlight the social value of fiction and fiction reading. Parents, school library organizations, and the media can promote reading fiction and fiction materials appropriate to the youth. This can be done by starting school and community book clubs, increasing fiction book choices in the school and community library, advocating the benefits of reading fiction in their Language & Reading classes/programs, or advocating the benefits of reading in various shows and advertisements. Further, it is recommended that adolescents and young adults, especially males, engage in reading fiction through their preferred media for empathy enhancement.

Current findings may be used to establish empathy training programs in schools and communities in the country. The youth can be trained to infer the mental and emotional states of real people and fictional characters. There could be potential benefits in exposing the youth to different ways of empathy enhancement. Fiction reading in various genre and formats can be included in such a program.

Conclusion and Recommendations

This study adds to the growing body of research that delve into the relationships between reading fiction and empathy. Specifically, it shows that reading fiction and empathy increases with age, females’ manifest higher fiction reading and empathy, and reading fiction increases empathy. Also, previous studies (Stansfield & Bunce, 2014; Bal & Veltkamp, 2013; Kidd & Castano, 2013; Mar et al., 2009) which found that reading fiction is related to empathy were done on young adults in developed countries. This study shows that, in developing countries, reading fiction among adolescents and young adults can also increase empathic levels.

Investigating cognitive and affective empathy in adolescents and young adults are critical to their socio-cognitive development. This also helps older adults guiding adolescents and young adults to better understand the potential of reading fiction to increase the youth’s understanding of the minds and emotions of the people they encounter daily in the real world.

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Online Learning in the Era of COVID-19: Computer Anxiety and Mental Health Among College Students

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Abstract

The recent outbreak of the coronavirus (COVID-19) pandemic has brought significant changes to higher education. In response to the pandemic, many colleges, and universities around the world, especially in developed countries, are embracing online or distance education. Transitioning to online learning that involves the use of information technology such as the internet and digital platform for course delivery has increased dramatically (World Economic Forum, 2020). However, these sudden changes have left some to speculate that the shift to online learning will change students' level of anxiety, stress, which could result in poor academic performance and low achievement of learning objectives. The purpose of this descriptive cross-sectional study is to investigate undergraduate and graduate students' perceptions of their mental health and computer anxiety in the era of the COVID-19 pandemic. Descriptive statistics such as simple percentages and averages were calculated. Also, a one-way ANOVA was used for analyzing the collected data. Results indicate that general mental health was significantly correlated with computer anxiety. The results also indicate that computer anxiety and perceived stress predicted poor general health. Demographic factors, such as sex, and academic discipline were significant predictors of computer anxiety, but age was not a significant predictor of computer anxiety. Also, the results show that chronic physical disabilities are a significant predictor of computer anxiety, and overall mental health, however, the presence of learning disabilities was not a significant predictor of computer anxiety. Implications and considerations for future research are discussed.

Keywords: anxiety, stress, college students, COVID-19, mental health, online learning

Many believe that following the emergence of COVID-19 pandemic, life has changed for many individuals around the world. The coronavirus outbreak, which was first identified in Wuhan, China in 2019, has presently become a global pandemic with approximately 15.3 million cases and 624,000 deaths (John Hopkins Corona Virus Resource Center, 2020). The continued spread and unabated transmission have affected the economic and social activities of individuals, families, communities, and institutions within countries (Pew Research Center, 2020). The effects, which are far-reaching and unprecedented, include physical and mental health problems, unemployment, business uncertainty and failure, social upheavals, and crisis in social and economic institutions (Centers for Disease Control and Prevention, 2019).

Globally, an important area in society that is significantly affected and undergoing tremendous change is higher education. Since the outbreak of the COVID-19 pandemic, there has been a surge in the number of concurrent users of many remote or online learning platforms that utilize the internet and other digital learning resources (World Economic Forum, 2020), however, some concerns remain about how anxiety, mental health problems, and demographic factors that impact computer-based or online learning in students in higher education especially in the era of COVID-19. Specifically, scholars are speculating that the shift to remote learning will increase students' level of stress and problems with their general health and that would consequently lead to poor academic performance. Stress and anxiety impair cognitive functions, which also affect academic functioning (Steelman et al., 2019; Shen et al., 2013). More importantly, the presence of a diagnosed mental illness such as depression, generalized anxiety disorder, panic disorder, obsessive-compulsive disorder, social anxiety, test anxiety, post-traumatic stress disorder, and so on are likely to worsen a student's computer anxiety and overall mental health state (Wiegner et al., 2015; Sultan & Kanwal, 2017). Although many scholars agree that COVID-19 is likely to increase the mental health challenges experienced by college students, few studies have examined the issues of computer anxiety and mental health in online learning in the era of COVID-19.

Theoretical Framework

The theoretical framework for the study is grounded in the Cognitive Interference theory (Spielberger & Vagg, 1995). Cognitive Interference theory notes that anxiety has a negative impact on working memory, which affects the ability to learn (Paechter et al., 2017). Cognitive interference theory also indicates that highly anxious individuals tend to be more self-centered and self-critical and more likely to make negative responses that interfere with task performances (Sarason et al., 1988). Additionally, stress-related cognitive interference induces performance anxiety, impedes learning memory retrieval or update, and results in poor performance. Anxiety impedes the performance of a specific task by impairing the efficiency of information processing efficiency (Eysenck et al., 2007). Consequently, an understanding of students' perceived stress, general health, and its relations to their computer anxiety can provide insight into the factors that contribute to these heightened concerns, as well as how educators can create, shape, and utilize these ubiquitous platforms to enhance student-learning outcomes.

College Students' Mental Health

Due to the current situation with COVID-19 and the need for social distance, most higher education institutions around the world have begun to offer distance learning to prevent and contain the spread of the virus. However, it is likely that this trend will continue in the future in many universities. This means that, as opposed to the past, college students do not have freedom of choice whether they like or dislike taking online classes. This lack of freedom might

be considered a risk factor increasing the level of anxiety among students. Moreover, many may not feel comfortable using computers and the internet. There is a huge gap in the literature investigating college students' attitudes and comfort level using technology during this period, while it appears that online learning is considered an essential part of the future teaching paradigm. Facing anxiety while using technology might result in experiencing an elevated level of stress among college students and therefore this might negatively impact their academic performance.

Stress

Stress has been identified as the most common health factor impacting students' learning and academic performance (Lazarevic & Bentz, 2020). It has been reported that more than 45% of college students surveyed reported feeling stressed (American College Health Association, 2018). Stress in college students is associated with the development of serious mental health issues such as anxiety and depression and overall poorer quality of life and well-being (Moylan et al., 2013; Ribeiro et al., 2018). Perceived stress has been described as the feelings or thoughts that an individual has about how much stress they are under at a given point in time or over a given period (Robles et al., 2016). Lee et al. (2016) examined the effect of perceived stress on life satisfaction as well as the mediating effect of self-efficacy on the relationship between the aforementioned factors using 282 Korean undergraduate students. The authors found that individuals that perceive their situation as controllable and positively challenging, become more confident in their abilities and as a result, experience improved life satisfaction. The authors also found that self-efficacy mediated between perceived stress and life satisfaction. Relative to learning, stress has a memory-modulatory effect (Schwabe et al., 2012; Simon-Kutscher et al., 2019; Vogel & Schwabe, 2016).

The experience of being stressed can trigger anxiety- a feeling of fear, worry, or unease. In many instances, anxiety could be an individual's reaction to stress. Mamo et al. (2012) found that increased perception of stress might be associated with a moderate level of anxiety. Although anxiety can be considered a normal response to stress, higher levels of perceived stress may result in the development of anxiety disorder (Wiegner et al., 2015). As students experience heightened anxiety, they are more likely to perform poorly, which causes them to question their abilities and further deepens their perceived stress (Racic et al., 2017). Therefore, understanding this dynamic as it relates to college students' perception towards online learning during the era of COVID-19 is essential.

Computer Anxiety

Studies have shown that computer anxiety is common among college students (Stiller & Köster, 2016). Leso and Peck (1992) defined computer anxiety "as a feeling of being fearful or apprehensive when using or considering the use of a computer. In the last decade, interest in and use of online learning has increased among colleges and universities and has transformed the delivery of higher education in many developed countries (Avella, 2016). However, the high level of interaction with computers or internet-related technology in higher educational settings for learning, communication, social interaction, and completion of assignments can be overwhelming for many students. Previous studies have stated that for some individuals, the use of technology and especially, computers, could create strong negative emotional states, not only during interaction but even before, which would result in the individuals developing a negative perception of such technology or engage in behaviors that reduce their likelihood for continued use (Saadé & Kira, 2009). These negative emotional states are likely to affect the capacity of the individual to interact with technology, learn, develop social relationships, and the overall well-being of the individual (Sultan & Kanwal, 2017).

Demographic Factors

Previous research suggests that demographic factors such as age, level of education disability status may also affect individual attitudes towards computers and internet use (Cazan, et al., 2016; Steelman & Tislar, 2019). The literature shows that not all individuals have a positive experience with using computers or technology (Steelman & Tislar, 2019). For instance, some findings show that older adults have a higher level of tech anxiety compared to other group ages (Steelman & Tislar, 2019). Older adults had more anxiety with using the internet and especially with using it to complete tasks and are therefore more reluctant to use digital technologies. Research has also shown females experience a higher level of computer anxiety compared to male users (Chua et al., 1999; Sultan & Kanwal, 2017). Also, young adults and older individuals may have anxiety about keeping up with schoolwork or trouble concentrating on online learning (Abdous, 2019).

Public health experts believe that the presence of diagnosed mental illness can affect the ability of college students to successfully complete their academic programs (American College Health Association, 2015). It has been reported that among students diagnosed with mental illness, technological issues including the use of computers and online learning are a source of anxiety and stress (Saade et al., 2017). These influences and the impact of these factors are likely to be heightened in times of turbulence or uncertainty such as the present era of COVID-19. However, these relationships are unexplored and therefore need to be investigated.

The purpose of this descriptive cross-sectional study, therefore, is to investigate computer anxiety, mental health, and online learning in the era of COVID-19. Additionally, the study aims to investigate relationships among preexisting mental health (e.g., learning disabilities, mental health disabilities) and computer anxiety and its overall impact on students' current mental health. The study will also examine the extent to which demographic variables (e.g., sex, age, academic level, and history of preexisting disabilities) are related to computer anxiety and overall mental health in the era of COVID-19.

To achieve the objectives of the study the following research questions were addressed:

1. Is there a significant relationship between computer anxiety and general mental health and perceived stress among undergraduate and graduate online learners?
2. Do computer anxiety and perceived stress predict undergraduate and graduate online learners' overall current mental health in the era of COVID-19?
3. Do demographic variables (sex, age, academic major, education level, and history of disability) predict computer anxiety?
The following hypotheses are posed in conjunction with research question 3 above.
 - I. Sex: (trichotomous as female, male, intersex)- *Hypothesis*: Female learners will report higher computer anxiety (Sultan & Kanwal, 2017; Saade et al., 2005; Chua et al., 1999).
 - II. Age- *Hypothesis*: Older learners will report higher computer anxiety (Lee et al., 2019; Sultan & Kanwal, 2017).
 - III. Academic level: (Undergraduate vs graduate)- *Hypothesis*: Graduate students have lower levels of computer anxiety (Peng, Tsai, & Wu, 2006).
 - IV. History of any disability: *Hypothesis*: Students with learning disabilities and mental conditions will achieve higher scores in computer anxiety (Conti-Ramsden et al., 2010; Harrysson et al., 2004).

Methodology

Design

A descriptive cross-sectional design in which condition and potentially related factors are measured at a specific point in time for a defined population was used for the study (Smyth, Dillman, & Christian, 2009). A survey instrument was used for the collection of data. Surveys are highly considered as a good method for assessing attitudes, perceptions, and intended behaviors of a sample when direct observation of every member of the population is not feasible (Smyth et al., 2009). A web-based survey resource called Qualtrics, which allows users to store and access data and programs over the internet instead of their computer's hard drive. The survey was accessible via a link to an invitation prompt placed in emails sent to the faculty. The invitation promptly contains information about the researcher, a statement about institutional approval for the study, the nature of the study, and statements about confidentiality and informed consent. Participants completed the survey online anonymously; no personal or identifying information such as email addresses, names, and IP addresses was collected.

Participants

The participants for the study were graduate and undergraduate students who were enrolled at a large Midwestern University during fall 2020. The university is diverse in terms of religious beliefs, race, language, ethnicity, gender, and (dis) ability, and so on. According to recent enrollment data, there were a total number of 16,769, students enrolled in fall 2020. The university offers over 100 undergraduate programs and more than 80 graduate programs. The sample was drawn from an unknown number of enrolled students in one of the large colleges in the university.

Descriptive data revealed there were 155 participants. The age range was 18 -50 years. Of the 155 participants, 23 (14.8%) were male and 123 (79.4) were female. In terms of academic level, 14 (9.0%) were graduates, and 132 (85.2%) were undergraduates. Among the respondents, 80 (51%) were from health services, 47 (30.3%) were from rehabilitation services and rehabilitation counseling, 12 (7.7%) were from health professions education, and 2 (1.3%) from addiction studies. Relative to formal diagnosis, 21(13.5%) reported having a generalized anxiety disorder, 3(1.9%) had obsessive-compulsive disorder, 7(4.5%) reported having panic disorder, 9(5.8%) reported having posttraumatic stress disorder, and 7(4.5%) reported social phobia. Also, 9(5.8%) of the respondents reported having test anxiety, 38(24.5%) reported having depression, 4(2.6%) indicated that they were diagnosed with bipolar disorder and 1(.6%) reported having psychotic disorders including schizophrenia.

Nine (5.8%) of the respondents also indicated that they had a formal diagnosis of chronic physical disabilities, whereas 136 (87.7) reported as not having a chronic physical disability. Participants were also asked if they had any history of learning disabilities. Among all, 2 (1.3%) reported having Dyscalculia, 2 (1.3%), reported Dysgraphia, 4 (2.6%) Dyslexia and 4 (2.6%) Nonverbal learning disabilities. Among all, participants with ADHD (7.1%) and ADD (5.8%) reported as the highest condition among the participants.

Instruments

The data collection instruments consisted of three surveys and a demographic sheet. The following research instruments were used:

- 1- *Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983)*. PSS is one of the most commonly used psychological instruments for measuring an individual's

perception of stress. PSS measures the degree to which situations in one's life are considered stressful. The PSS items ask about participants' thoughts and feelings during the last month, and direct queries regarding current levels of experienced stress. The PSS was used for this study because it enables researchers to determine whether "appraised" stress is an etiological or a risk factor in behavioral disorders or disease. For example, we intended to examine if this scale determines whether the unexpected presence of COVID-19 can be appraised as a significant risk factor causing stress in the lives of college students since the pandemic started.

- 2- ***Short General Health Questionnaire (GHQ 12; Goldberg & Hillier, 1979).*** GHQ is a self-administered questionnaire used in non-psychiatric clinical settings to screen, identify, and quantify possible common psychiatric disorders. GHQ contains two main areas: (1) characteristics that focus on one's inability to function as a "healthy" and/or "normal" individual, (2) the possibility of existing new distressing phenomena (Makowska et al., 2002). The original version contains 60 items, but the shortened 12-Item General Health Questionnaire (GHQ-12) which is also recommended by the World Health Organization (WHO) is the most broadly used version of the GHQ. This instrument is a well-validated psychiatric diagnostic scale and is frequently used to screen common mental health disorders (del Pilar Sánchez-López & Dresch, 2008)
- 3- ***The Computer Anxiety Rating Scale (CARS; Heinssen, Glass, and Knight (1987).*** The modified CARS instrument (20-item, five-point scale) was used to measure the level of anxieties students report. CARS is a broad, multidimensional scale that enables researchers to conceptualize the level of computer anxiety. Literature shows that CARS is capable of measuring areas of general anxiety about computers, the level of confidence in ability and motivation to learn about computers, and the beliefs towards the power and control of computers.
- 4- ***A Demographic Questionnaire.*** The demographic questionnaire gathered information about students' sex, academic majors, and formal diagnosis of learning and/or mental disabilities. Students were also asked to rank their level of satisfaction with online classes and their willingness or preference to take online classes on a scale of 0-10. The responses on the demographic and survey instruments were used to provide the researchers with basic information about the respondents of the study and supply data for several variables in the analyses.

Data Collection Procedures

Approval to conduct the study was obtained from the Institutional Review Board (IRB) for ethical protection of all human subjects from the university where the study was conducted. Following the IRB approval, the survey link, research invitation, and the disclosure statement were emailed to faculty who teach 100% online or hybrid undergraduate and graduate courses using the university faculty and staff directory. Faculties were also asked to forward the email to their students and encourage them to complete the online survey during the fall 2020 semester. In order to increase the number of research subjects, faculty offered students who voluntarily self-selected to participate in the study, some incentives (extra credit points), to complete the survey before the completion of the semester. Students completed the survey voluntarily and anonymously, as no personal or identifying information was collected. At the conclusion of data collection, raw data were exported into SPSS software for data analysis.

Data Analysis

Descriptive statistics (simple percentages, means, and standard deviation) were calculated. Regression analysis was completed to assess the relationship between the independent variables and the dependent variables. Specifically, the regression analysis focused on examining the relationships among computer anxiety, perceived stress, demographic variables, and the respondent's overall current mental health in the era of COVID-19. Using ANOVA, the analysis was also focused on finding out differences in computer anxiety, perceived stress, and overall current mental health relative to undergraduate and graduate, college students, and their demographic characteristics.

Results

RQ 1. Is there a significant relationship between computer anxiety and general mental health and perceived stress among undergraduate and graduate online learners?

Table 1

Descriptive Statistics and Correlations among Study Variables (N=155)

Variable	Mean	SD	1	2	3
General Mental Health	28.5325	9.24480	-		
Perceived Stress	34.0390	4.36696	.058	-	
Computer Anxiety	52.8182	19.2491	.499**	-.043	
		3			

*p < .05, **p < .01

The results show general mental health was significantly correlated with computer anxiety. This means that students that report poor general mental health are more likely to experience increased computer anxiety. However, perceived stress was not correlated with general mental health.

RQ 2. Do computer anxiety and perceived stress predict undergraduate and graduate online learners' overall current mental health in the era of COVID-19?

Table 2*Relationships Between Computer Anxiety, Perceived Stress, and General Health*

ANOVA	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	3655.958	1827.979	29.301	.000
Residual	151	9420.380	62.387		
Total	153	13076.38			

The results of the regression as shown in Table 2 indicated that taken as a set, the two predictors account for 28% of the variance in computer anxiety. The overall regression model was significant, $F(2,151)=29.30$, $p<.000$, $R^2=.28$. It was found that computer anxiety significantly predicted overall current mental health ($\beta = .24$, $p<.05$), as did perceived stress ($\beta = .37$, $p<.05$). Overall, the results seem to indicate that individuals or college students who experience computer anxiety and perceived stress are more likely to have poor overall physical and mental health.

RQ 3. Do demographic variables (sex, age, academic major, education level, and history of disability) predict computer anxiety?

Table 3*Relationships Between Demographic Variables and Computer*

ANOVA	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	7	47305.858	6757.980	105.798	.000
Residual	147	9389.780	63.876		
Total	154	56695.639			

Table 3 above shows the results of the regression analysis which indicate that collectively, the seven (7) predictors account for 83.4% of the variance in computer anxiety. The overall regression model was significant, $F(7,147)=105.80$, $p<.000$, $R^2=.83$. It was found that age was not a significant predictor of computer anxiety ($\beta = .07$, $p>.05$). However, sex was a significant predictor ($\beta = .16$, $p<.05$), as did academic level ($\beta = .50$, $p>.05$). Academic discipline or major was not a significant predictor of computer anxiety ($\beta = .05$, $p>.05$). The results also show that chronic physical disabilities are a significant predictor of computer anxiety ($\beta = .22$, $p>.05$). Mental illness was also a significant predictor of computer anxiety ($\beta = -.06$, $p>.05$). The presence of learning disabilities was not a significant predictor of computer anxiety ($\beta = .03$, $p>.05$). Overall, the results seem to indicate that individuals or

college students who experience computer anxiety and perceived stress are more likely to have poor overall physical and mental health.

In order to further explore the relationships between each of the demographic variables and computer anxiety, we tested the hypothesis that was previously posted. The results indicate that females experienced less computer anxiety ($M = 57.12$, $SD = 7.12$) than males ($M = 58.00$, $SD = 7.43$). Therefore, the null hypothesis was rejected. Consistent with the hypothesis, relative to age, the results indicated that the older learners (individuals within the age range of 40-50, as well as those that are above 50, had the highest level of computer anxiety ($M=58.500$, $SD=1.72$), ($M=40.50$, $SD=26.16$), compared with other age groups: 18-28($M=57.34$, $SD=6.86$), 29-39 ($M=57.88$, $SD=5.09$).

With respect to educational levels, the results are consistent with the hypothesis. Specifically, the results showed that undergraduate learners had the highest mean ($M=57.50$, $SD=6.50$) compared to graduate learners ($M=54.92$, $SD=11.65$). Results also indicated that students with Test Anxiety ($M= 61.66$, $SD=6.56$) had higher computer anxiety compared with those with, Panic Disorder ($M=60.14$, $SD=6.87$), Post Traumatic Stress Disorder ($M=58.33$, $SD=6.52$), OCD ($M=58.00$, $SD= 6.93$), Bipolar Disorder ($M=56.75$, $SD=5.91$), Generalized Anxiety Disorder (GAD) ($M=56.71$, $SD= 6.24$), Depression ($M=50.13$, $SD=18.06$), and Social Phobia ($M=48.71$, $SD=30.44$). Lastly, the results also indicated that among the list of learning disabilities, ADHD had the highest score reported by the participants ($M=69.00$, $SD=4.96$). Other learning disabilities were reported as Dyslexia ($M=62.00$, $SD=8.83$), Dyscalculia ($M=60.50$, $SD=3.53$) ADD ($M=56.78$, $SD=5.09$), Nonverbal learning disabilities ($M=55.75$, $SD=10.75$), Dysgraphia ($M=55.50$, $SD=.70$) respectively.

Discussion

The purpose of this descriptive cross-sectional study was to investigate computer anxiety, mental health, and online learning in the era of COVID-19. We also examined the relationships among pre-existing mental health (e.g., learning disabilities, mental health disabilities) and computer anxiety and its overall impact on students' current mental health. Additionally, the study also examined the extent to which demographic variables (e.g., sex, age, academic level, and history of preexisting disabilities) are related to computer anxiety and the overall mental health of college students in the era of COVID-19. First, the results show that general mental health was significantly correlated with computer anxiety. This means that students that report poor general mental health are more likely to experience increased computer anxiety. Previous studies such as Beckers et al. (2007) and Maricutoiu (2014) also found that computer anxiety is clearly correlated with the tendency to experience, and report negative emotions such as fears, worries, and anxiety across many situations. This could be because when individuals are predisposed to anxiety and other mental health problems, the additional pressures from the necessity of using technology act as a tipping point, making them feel more insecure and overwhelmed.

Second, the results of the study show that computer anxiety and perceived stress do indeed predict undergraduate and graduate online learners' overall current mental health. This is consistent with the findings of Racic et al. (2017) that high levels of perceived stress predispose college students to anxiety and low quality of life. This is especially the case for undergraduate and graduate students who are first time users of online learning technology, in the current COVID-19 pandemic. As previously mentioned, the pressures from the necessity of using technology can be difficult for first-time undergraduate students or older graduate students,

who may not possess the necessary skills, or have not found the ability to balance the requirements of online learning and other demands.

Third, the results of the study showed that relative to sex, males reported a higher level of computer anxiety than female learners which is inconsistent with the findings of Sultan and Kanwal (2017), that female and older distance learners reported high computer anxiety and low self-efficacy. It could be that the context in which the current study was completed had a large number of female students that were more proficient in the use of computers, and online learning.

It is expected that if more colleges and or degree programs were surveyed, the number of males may have been greater. With respect to age, we also found that older learners had a higher level of computer anxiety compared to other age groups. This is consistent with the findings of Lee et al. (2019), and Sultan and Kanwal, (2017). This could be because older students tend to generally have less computer experience and tend to exhibit more resistance to using computers and other online learning technology (Chien, 2008). We also found that undergraduate learners had a higher level of computer anxiety, which is consistent with Peng et al., (2006). As mentioned earlier, undergraduate students are often unprepared for the high level of technology found in online instruction in colleges. Students would discover their skills are inadequate when it comes to getting information and completing the majority of their coursework online. In this era of the pandemic, many first-year students who are attending college for the first time and are compelled to complete their classes remotely and virtually, are likely to struggle with both the format and the delivery of classes.

Finally, we also found that students with learning disabilities and mental conditions reported higher scores in computer anxiety. This is consistent with the findings of previous scholars (Conti-Ramsden et al., 2010; Harrysson et al., 2004). The presence of a learning disability or mental health condition is likely to impact students' ability to remain focused, positive, and motivated to independently complete their coursework online using a computer. For many students with learning disabilities or mental health conditions, the symptoms, treatment, and self-management tend to be overwhelming, and constant, often impacting every aspect of daily living, including the ability to complete classes online.

Implications for Mental Health Professionals, Faculty and University Administrators

This study has significant implications for college administrators, faculty, and mental health professionals, especially those that work with students with learning disabilities or mental health challenges. First, an important factor for reducing computer anxiety and increasing students' overall mental health wellbeing in the current COVID-19 era might be improving the availability and quality of academic support areas of technical skills, study skills, and time management (Eleftheriades et al., 2020). To successfully achieve this, university administrators should work with faculty to ensure that professors cultivate learning environments that support students' well-being. Faculty may need to meet each student at their level of computer usage or competence and to provide the right type of online course delivery and support that can concurrently take students' challenges into consideration and improve their learning outcomes. Also, university administrators and faculty may need to create alternative formats for course delivery that may reduce the need for the constant use of computers and other online learning platforms to complete coursework. Additionally, administrators and leaders may need to develop policies that protect students who struggle with completing their coursework within the specified time frame due to their struggles with computer anxiety or mental health issues.

Mental health professionals, especially those that work in higher education settings, also need to develop workshops, and programs that would enable students with mental health struggles to learn how to increase their help-seeking behavior. With the increase in online learning, more students with mental health problems including those with computer anxiety are less likely to fall through the cracks, since many are often reluctant to seek help or do not know how to commence the process. It may be necessary for mental health counselors working in university settings to provide self-help tools and support options that students can access on their own and use.

Limitations and Future Recommendations

It is essential to discuss the limitations that exert influence on the results of this study. The first limitation of this study was the sample size. Although we had met the minimum sample size requirement given medium effect size and alpha level.05 we were not able to fully study the complex interactions. That might be due to the nature of the sample, which was not balanced. For instance, of the 155 participants, the number of undergraduate students was 132, whereas there were only 14 graduate students. The same as gender, 23 males versus 123 females. To prevent these inequalities, it is recommended that a larger sample size be included in future similar studies to help with generalizations.

Another limitation was the nature of the method of recruitment. Although the invitation letter and the survey link were emailed to all faculty of the SIHP and they were asked to distribute those with their students during the Fall 2020 semester, the indirect nature of the data gathering through emails only, precluded regular follow-ups. Also, it is usually common to offer rewards in order to increase the research subjects and encourage them to complete a survey, in this case, extra credit opportunities to students. However, in this research, it was not possible to mandate faculty to incentivize their students for participation in the research.

Lastly, in this research, we only targeted students who were enrolled in the School of Health and Interdisciplinary professionals during a specific period in a specific university in a particular region. It is expected that a different set of findings will be achieved if data was gathered from students of

different disciplines or in a different region. Therefore, more cross-cultural studies are recommended to investigate the student's perceptions of online learning.

Conclusion

The impact of COVID-19 on the mental health of college students will be felt both in the immediate and in the future. For students that struggle with additional mental health challenges, including computer anxiety, these challenges may impact students' ability to successfully learn in the present times as well as in the future. As more colleges and universities fully embrace online learning in the era of COVID-19, there is a need for stakeholders to understand the nature of the challenges and measures that can be put in place to address them to improve these learning outcomes and experiences of this population of college students. These measures should be comprehensive, individualized, and should transcend beyond addressing the needs of this population in the current period, as well as in the future. Nowadays, students in higher education are learning online in greater numbers than ever in the past, therefore, instructors would need to possess higher technical (compute or internet) skills and competencies than the basics. Associatively, higher education faculty need to be fully prepared to use pedagogical approaches that guarantee both student's well-being and effective online learning.

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Comparative Perspectives on Motivations and Values Among Novice Teachers

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Abstract

The current study aims at analyzing and comparing novice teachers' motivations, values, and beliefs ($N=810$) from two different countries, namely the United States and Switzerland. Both groups, the US participants ($n=327$) and the Swiss participants ($n=483$) were enrolled in a teacher training program in their respective countries. Study results identified the main teaching motivations across all subsamples as related to participants' personal values, social values, their teaching views, and instructional beliefs. Study results show that while motivational factors were similar at many levels between the two subsamples, their teaching views and their instructional beliefs were different and varied across participants from the two countries. Findings can help educators understand the interplay between teaching motivations and beliefs as well as cultural nuances related to these concepts.

Keywords: beliefs, motivations, teachers, values

International research in education has examined the teaching motivations and beliefs among teachers to understand various aspects related to individual choices for a teaching career (Berger & Girardet, 2020; Thomson, Turner, & Nietfeld, 2012; Thomson & Palermo, 2014; Watt & Richardson, 2008, 2011). Many countries experience acute teacher attrition and simultaneously the need for teaching quality. Examining the key motivations and beliefs of individuals pursuing a teaching career could help educators, administrators and other stakeholders understand factors related to teacher attrition (i.e., entry teaching reasons versus exit reasons). Analysis of novice teachers' professional goal development, their initial teaching motivations, and their early beliefs about what teaching means can shed light into understanding *possible mismatches* between their initial views of teaching and the existing realities of teaching. Such mismatches can influence teachers' rethinking of their professional goals, fueling dissatisfaction with the teaching profession and possibly contribute to teacher shortages.

Research suggests that too often teachers grow dissatisfied with their profession and even less efficacious in their teaching because the reality of teaching was different than how they initially perceived it (i.e., Parkes & Jones, 2012; Thomson, Turner, & Nietfeld, 2012; Thomson, Huggins, & Williams, 2019; Thomson, Walkowiak, Whitehead, & Huggins, 2020). National and international educational reports show that thousands of teachers leave the profession, most of them with fewer than five years of experience (National Commission on Teaching and America's Future, 2007; OECD, 2009; Richardson & Watt, 2005, 2006). There is a growing consensus among researchers and educators that many teachers leave the profession *because teaching is not what they believed it would be*. As they learn what the work truly is, they become dissatisfied with the profession, citing working conditions, the lack of administrative support, little peer collegiality and a lack of influence over school policy as reasons for their departure (Ingresoll & Smith, 2004; Müller, Alliaata, & Benninghoff, 2009). Indeed, these factors point to prospective teachers having goals and belief systems about teaching that do not often match the realities of classrooms and schools (Thomson & McIntyre, 2013; Thomson & Palermo, 2018). It is essential therefore to understand *prospective teachers' initial professional goals* for teaching, including their teaching *motivations*, their *views about teaching* and *instructional beliefs*.

Teaching Motivations

A bulk of educational research has been developed in recent years because of increasing rates of attrition among teachers worldwide (Berger & D'Ascoti, 2012; Ingresoll & Smith, 2004; Thomson & Palermo, 2014, 2018; Watt & Richardson, 2008, 2011). Several research studies focus on exploring the initial motivations and how these influence individuals' choices about teaching, while other studies focus on motivation and persistence in the teaching profession. Researchers commonly classify teaching motivators into intrinsic and extrinsic reasons, described as key reasons and values to teach, along with individuals' perceptions of and commitment to the teaching career (i.e., Konig & Rothland, 2012; Pop & Turner, 2009; Thomson, Turner, & Nietfeld, 2012; Richardson & Watt, 2005). Previous research (Kyriacou & Coulthard, 2000) has argued that individuals enter the teaching profession for one of three primary reasons, including altruistic reasons—such as the conception of teaching as a socially valuable profession—in addition to intrinsic and extrinsic reasons. More recent research, emphasizing an expectancy-value perspective, have found that the types of values and expectations teachers exhibit are crucial for their teaching choices, effort, and goal persistence (i.e., Fokkens-Bruinsma & Canrinus, 2012; Thomson & Palermo, 2018; Watt & Richardson, 2012; Watt et al., 2012).

International studies conducted with prospective teachers from various countries, including the United States, Australia, Switzerland, Germany, Turkey, and Estonia have reported similar conclusions, highlighting the importance of values across cultural contexts (Berger & Girardet, 2020; Kilinc, Watt, & Richardson, 2012; Taimalu, Luik, Voltri, & Kalk, 2011; Watt & Richardson, 2008, 2011; Watt, et al., 2012). Studies exploring teaching motivation from an expectancy-value theory perspective have found that teachers' values and expectations are crucial for their individual teaching choices, persistence in pursuing the teaching goal, and the effort invested in accomplishing their professional goals (Fokkens-Bruinsma & Canrinus, 2012; Parkes & Jones, 2012; Watt & Richardson, 2008).

Teaching Beliefs

Research findings show that teachers' motivations for teaching along with their beliefs about teaching are at the core of teachers' professional identities and classroom decisions (Guarino, Santibanez, & Daley, 2006; Lauermann, & Karabenick, 2011; Rinke, 2008). Studies exploring the relationship between teacher expectancies and ability beliefs find these constructs to be strongly connected with motives for entering and persisting in the teaching profession, as well as engaging in meaningful professional development initiatives. In their study, Ware and Kitsantas (2010) found that teachers' beliefs, including teachers' efficacy for classroom management, significantly predicted their commitment to teaching. A growing body of literature examining teacher efficacy, or teachers' beliefs about their abilities to help students learn (Pajares, 1996; Thomson, Huggins, & Williams, 2020; Tschannen-Moran & Woolfolk Hoy, 2001), has shown that teachers constantly make judgments about the demands of teaching tasks as well as their abilities to meet these demands.

Additional research, examining teachers' expectation for compensation and the perceived value placed on salary showed that teachers expect an adequate pay for their level of engagement. While most teachers reported that teaching motivation is contingent on adequate compensation for work, other factors, such as satisfaction in working with students and making a difference in students' life, eclipsed their dissatisfaction with payment (Watt & Richardson, 2008; Watt & Richardson, 2012).

Study purpose

The purpose of the current study was to identify and compare teaching motivations across different subsamples, namely, novice teachers from the United States and Switzerland. We explored the most influential motivations, teaching career views, and instructional beliefs between the two subsamples, and how these constructs are comparable across subsamples. Our study is a response to the research scarcity in the teaching education field, particularly understanding novice teachers' motivations and beliefs from various countries and exploring cross-cultural comparisons. The research questions addressed in the current study are the following:

1. What key teaching motivators, views about teaching, and instructional beliefs can be identified among all participants ($N=810$)?
2. How do participants from the two samples (i.e., the US and Swiss) differ with respect to their teaching motivations, views about teaching, and their instructional beliefs?

Methods

Participants and Procedures

Data were collected using surveys from prospective teachers enrolled in a teacher education program in their respective countries, namely the United States and Switzerland ($N=810$). Participants from the US ($n=327$) were enrolled in a teacher training program in a college of education, at a major university, while participants from Switzerland ($n=483$) were enrolled in a VET education program (Vocational Education and Training).

Participants from the United States indicated in their survey responses that the majority were females ($n=241$; 73.7%); only 86 (26.3%) were male participants. In terms of age, the mean age for the US participants was 25 years and seven months, and their primary language was English. The US participants were enrolled in different areas/programs of a traditional teacher education program. Each program has a focus on a particular subject area, such as elementary education, mathematics education, science education. In the current study, most US participants were enrolled in the Elementary Education undergraduate program ($n=120$; 36.7%) and in the Science Technology Engineering and Mathematics (STEM) Education undergraduate program ($n=44$; 13.5%). Additionally, 69 (21.1%) participants were enrolled in the graduate Master of Arts Teaching program (MAT). Participants enrolled in an undergraduate teaching preparation program follow a 4-year coursework, which is the typical route in the US for becoming a teacher. Participants from the MAT program in the US, follow a 2-year master's program focusing on teacher training. Also, most US study participants ($n=295$; 90.2%) indicated in the survey that they intend to teach immediately after graduating from their teacher education program.

Participants from Switzerland indicated in their survey responses that the majority were males ($n=314$; 65.01%); only 169 (34.99%) were female participants. The mean age for the Swiss participants was 40 years and eight months. A unique feature of the Swiss sample was the fact that participants were from the two main linguistic regions of Switzerland: German speaking ($n = 327$, 67.7% of sample), and French speaking ($n = 156$, 32.3% of sample). Additionally, participants in the Swiss sample had previous teaching experience to a certain degree, unlike the US participants. All Swiss study participants were enrolled in an in-service teacher education program at the Swiss Federal Institute for Vocational Education and Training (VET), typically a 3-year program. They were previously trained in a relevant professional field as apprentices and had practiced for several years before beginning a career as VET teachers. As a result, the Swiss participants were already active as teachers, generally for a few years. The average teaching experience before commencement of their teacher education training was five years and three months. Most Swiss participants worked in an enterprise employing apprentices before switching into teaching, although one-third had no experience in employing and managing apprentices.

Measures

For the current study, we used two measures to examine prospective teachers' *motivations for teaching*, their *views about teaching*, and their *instructional beliefs*. To examine teaching motivations and participants' views about teaching we used an adapted version of the *FIT-choice scale* (Watt, & Richardson, 2007). This is a 62-item inventory on a 7-point Likert scale asking participants to rate their most influential motivations for teaching and their agreement with statements about the teaching profession. Psychometric properties of the *FIT-choice scale* are reported in the original study of Watt and Richardson (2007). In the adapted version of the

FIT-choice scale used in the current study, the reported Cronbach's alpha values for the instrument was .91 (for the US sample) and .84 (Swiss sample).

To examine prospective teachers' instructional beliefs, we used the *Teaching and Learning International Survey* (TALIS, OECD, 2009). This is an 8-item inventory on a 7-point Likert scale asking participants to rate their agreement with survey pedagogical statements. The reported Cronbach's alpha for the instrument was .95 (for the US sample) and .81 (Swiss sample). Appendix A presents the study constructs and sample survey items.

Results

Factor Analysis and Invariance Testing

To answer our first research question "What key teaching motivators, views about teaching, and instructional beliefs can be identified among all participants?", a series of factor analysis were performed. Multiple-group confirmatory factor analyses (M-G CFA) for the study sample ($N=810$) were performed for each instrument.

Teaching Motivation

Regarding participants' *teaching motives*, in the current study, we first tested the 32 teaching motivation items (from the *FIT-choice scale*). A 10-factor solution demonstrated satisfactory data fit¹: $\chi^2_{(876)} = 2068.04$, $p < .001$, $\chi^2/df = 2.36$ ($\chi^2_{US} = 1117.61$, $\chi^2_{Swiss} = 950.43$), CFI = 0.90, RMSEA = 0.06. Additionally, two second order factors, namely *personal utility value* (i.e., job security and time for family) and *social utility value* (i.e., social contribution, enhancing social equity) were modeled. Table 1 displays all motivation factors.

Across all data ($N=810$), the most influential motives on individuals' choices to become teachers were *aptitude*, *intrinsic value*, *opportunity*, *personal utility*, and *social utility*. These 5 factors had the highest ranking among participants from both countries.

Perceptions of the Teaching Career

A second test was performed on the 6 factors representing participants' *perceptions of teaching* (19 items, from the *FIT-choice scale*). The six types of *perceptions* identified in the current study were: 1) *expertise*, 2) *high demand*, 3) *social status*, 4) *salary*, 5) *social dissuasion*, and 6) *satisfaction with choice*. Table 1 displays the identified factors for participants' perceptions of teaching. The 6-factor solution was found to fit the data adequately²: $\chi^2_{(295)} = 609.96$, $p < .001$, $\chi^2/df = 2.07$ ($\chi^2_{US} = 288.16$, $\chi^2_{Swiss} = 321.80$), CFI = 0.93, RMSEA = 0.05.

Instructional beliefs

Finally, a third test was performed on the 2 factors representing participants' *instructional beliefs* (8 items, from TALIS). Two types of *instructional beliefs* were identified, namely: 1) *constructivism* and 2) *direct transmission*. The 2-factor solution was found to fit the data adequately³: $\chi^2_{(22)} = 50.03$, $p < .001$, $\chi^2/df = 2.27$ ($\chi^2_{US} = 13.66$, $\chi^2_{Swiss} = 36.37$), CFI = 0.95, RMSEA = 0.06. Table 1 displays the factors for participants' instructional beliefs.

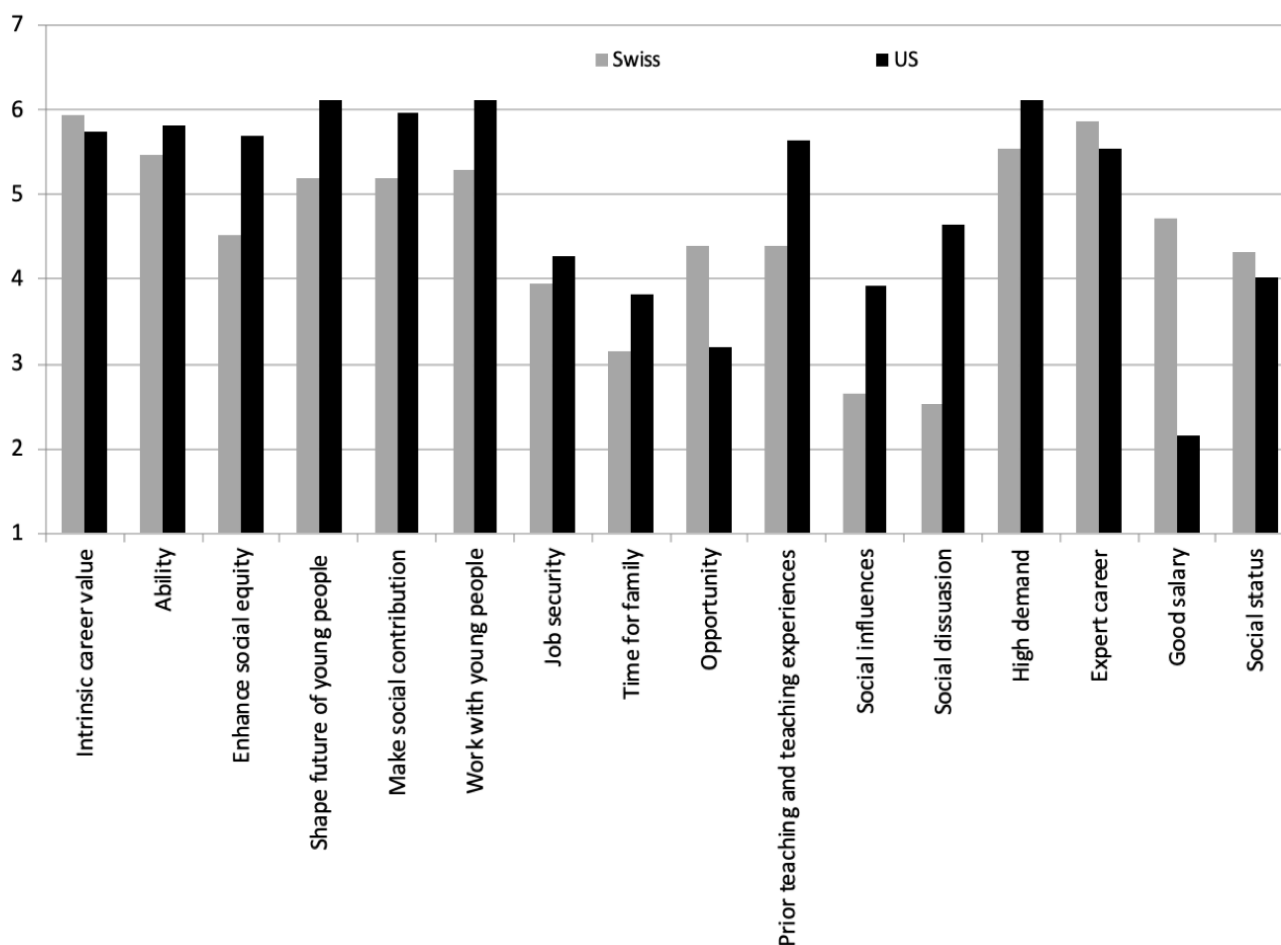
Table 1
Teaching Motivations and Perceptions of Teaching Results (N=810)

Scale	# Items	Swiss VET teachers (<i>n</i> = 483)		US novice teachers (<i>n</i> = 327)	
		Mean	SD	Mean	SD
<i>Motivation</i>					
Intrinsic career value	4	5.94	0.89	5.73	1.16
Ability	3	5.46	0.97	5.81	1.05
Enhance social equity	2	4.52	1.48	5.70	1.32
Shape future of young people	2			6.12	1.11
Make social contribution	3	5.19	1.07	5.96	1.16
Work with young people	4	5.28	1.24	6.12	1.09
Job security	3	3.94	1.50	4.28	1.40
Time for family	5	3.16	1.47	3.82	1.43
Opportunity	3	4.39	1.20	3.21	1.51
Prior teaching and teaching experiences	3	4.39	1.56	5.64	1.28
Social influences	3	2.65	1.60	3.93	1.66
Social dissuasion	4	2.52	1.42	4.64	1.62
<i>Perceptions of teaching</i>					
High demand	3	5.53	0.96	6.12	0.94
Expert career	2	5.86	0.92	5.54	1.15
Good salary	2	4.72	1.38	2.15	1.23
Social status & Teacher morale	6	4.31	1.03	4.03	1.27
<i>Instructional beliefs</i>					
Constructivism	4	5.72	0.81	5.49	0.84
Direct instruction	4	4.58	1.10	3.48	0.97

Comparative Analysis Across Samples

Comparison of factor means were performed to answer our second research question “How do participants from the two samples (i.e., the US and Swiss) differ with respect to their teaching motivations, views about teaching, and their instructional beliefs?”. Results from the comparative analysis are described below; additionally Figure 1 and Table 1 present a summary of the comparative results.

Figure 1
US and Swiss Samples Comparisons (N=810)



Motivation for the Teaching Career

Results from the factor analysis (conducted on the *FIT-choice* responses) identified five main motivators across all participants ($N=810$), as influential reasons for individuals' choices to become teachers. These factors were, namely: *aptitude* (i.e., teaching abilities), *intrinsic values* (i.e., enjoyment for teaching), *opportunity* (i.e., professional opportunities through teaching), *personal utility* (i.e., perceived practical utility), and *social utility* (i.e., helping society or other individuals). In both the US and Swiss samples, *intrinsic value*, *ability*, and *social utility value* were rated as more important than *personal utility value* and *opportunity*.

There were nonetheless mean differences across the subsamples. Comparison of factor means revealed that the US preservice teachers rated the importance of all the five key motivation factors as significantly higher (all $p < .001$) than Swiss participants. However, the US participants rated lower *opportunity* compared to the Swiss sample (factor mean difference = 1.29).

Beliefs about the Teaching Career

Inspections of means and standard deviations from participants' ($N=810$) responses indicated similarities and differences across the two samples with respect to their beliefs about teaching. Concerning participants' perceptions of the teaching career, the US prospective teachers reported higher scores on *task demand* and *social dissuasion* (standardized factor mean

differences of 0.78 and 1.37 respectively) compared to Swiss participants. However, the US sample rated lower in their survey *good salary* compared to the Swiss sample (standardized factor mean difference = 1.88; all $p < .001$). Other factors, like *expertise*, *social status*, and *satisfaction with choice* did not differ significantly across samples.

Instructional beliefs

Participants' responses about their instructional beliefs varied between the two samples. With respect to participants' survey responses about *direct transmission beliefs* the Swiss sample scored higher than in the US sample (standardized factor mean difference = 1.36; $p < .001$). Regarding participants' survey responses about their *constructivist beliefs*, results showed no significant differences between the two subsamples.

Discussion

Overview of Results

The interplay of different types of teaching motivations and instructional beliefs was unique for each subsample, however similarities in motivational factors (US and Swiss samples) were evident. Findings show that the most influential motivational factors for participants' teaching choices were similar for the two samples (i.e., *social values*, *intrinsic values*), but others were dissimilar and/or specific only for one subsample (i.e., perceived *opportunity*). Overall, findings from the comparison analysis revealed similarities with respect to participants' rating of *teaching motivations*; participants from both the US and Switzerland indicated high ratings on *intrinsic motivations*, *ability to teach*, and *work with young people*. However, differences between the two samples regarding their teaching motivations were observed mainly related to antecedent socializations (i.e., *prior teaching experience*, *social influences*, and *social dissuasion*). Additionally, similarities were found regarding participants' *perceptions about teaching*, particularly their views about the teaching social status (i.e., *expert career* and *teaching morale*), but differences were observed as related to participants' perceptions of salary and effort (i.e., *good salary* and *high demand career*). Similarities between the two samples were observed regarding participants' responses on *constructivist beliefs*, but differences were recorded regarding their *direct transmission beliefs*.

These results are in line with most international research findings in the field showing that intrinsic, altruistic, and social motivations are the most common for individuals' choice to enter teaching. The initial career satisfaction, in addition to self-perceived teaching ability has been linked to altruistic motivations and intrinsic value in studies from various countries (Pop & Turner, 2009; Thomson, Turner, & Nietfeld, 2012; Saban, 2003; Watt & Richardson, 2007, 2008, 2011).

Furthermore, study findings suggest that at some level all participants had similar motivations for teaching, but different antecedent socializations and perceptions of the teaching career. These differences can be explained by the different cultural contexts of each country, by the characteristics of each teacher training program, and by the participants' demographics. Considering the teacher education programs and the demographic characteristics for both samples, there are specific contextual differences. In terms of gender, most US participants were females, while most of the Swiss participants were male. As for age, for the Swiss participants the average age was 40 years old, while for the US participants the average age was 25 years old. Given the age gap between the two samples, it can be inferred that their life and professional goals could be somehow different. Additionally, the US participants followed a traditional teacher training program, teaching being their first choice of a career. The Swiss

participants, however, already had experience in a different professional field prior to entering the teacher education program, thus they can be considered career switchers.

Findings from international studies have shown that one's motivation for teaching and beliefs about teaching can vary across different contexts. These variations are reflecting the sociocultural contexts in different countries that could shape individuals' teaching views. Studies conducted in Australia (i.e., Watt & Richardson, 2007, 2008), Turkey (i.e., Saban, 2003, 2004), UK (i.e., Kyriacou & Coulthard, 2000) and the US (i.e., Thomson, Huggins, & Williams, 2019; Thomson, Turner, & Nietfeld, 2012; Thomson & McIntyre, 2013) show that individuals' teaching motivations are strongly connected with their teaching beliefs and their expectations of the profession.

Implications

The current study findings can add to the existing literature in the field by showing that teaching motivations, professional views and instructional beliefs differ across countries and cultures, thus helping teacher educators better understand and support teachers' professional goals. Teacher education programs may also benefit by tailoring teacher training programs to consider differences in the initial motivations and teaching beliefs of teachers (Thomson & Palermo, 2014). Efforts can be taken to better align coursework and field experiences with prospective teachers' beliefs, expectations, and values, while at the same time providing them with opportunities for these psychological attributes to be challenged by the various sides of teaching.

In the US, reforms introduced two decades ago emphasize the need to place more qualified and motivated teachers in the field to increase students' academic achievements. To do so, teachers need to be better prepared in their teaching education programs, and helped to develop professionally (AEEE, 2005; NCTQ, 2004; NCTA, 2007). In Switzerland, similarly, teacher education programs aim at promoting quality teaching as well and efforts to retain teachers via all-encompassing professional development programs (Berger & Girardet, 2020).

Limitations and Future Research

Some of the study limitations are due to participants' demographics and their academic background. Participants in this study followed a teacher preparation program in a public institution in their respective countries (US and Switzerland). It is possible that their teaching motivations, their teaching views, and their pedagogical beliefs could be different from individuals following a non-traditional teacher training program, or individuals enrolled in teacher training programs from private institutions.

Future research could address these limitations by examining the motivations, teaching views and beliefs of participants with various backgrounds, and following various teacher education routes to licensure (i.e., from private and public institutions, traditional and non-traditional teacher training programs). Future studies could build on our study by using longitudinal mixed methods designs to follow teachers into their first five years of teaching (which are critical to teacher professional development) and analyze more in-depth participants' changes in their teaching motivations and instructional beliefs.

Conclusion

Overall, findings show that across both samples the key motivational factors for choosing a teaching career were similar, with intrinsic motivation and social values being the most

influential, but other notable differences existed. Participants' teaching views and instructional beliefs varied across the two samples to a larger degree compared to motivations. While the current study presents a broad image of motivations, teaching views and instructional beliefs of novice teachers from two countries, it also points to the need to examine more deeply the myriad of factors that can better explain differences in the vocational choices and beliefs system of novice teachers. Motivation may predict the extent to which individuals will learn from their teacher training programs and can help change their instructional beliefs and classroom practices. Teachers' motivations for teaching and their beliefs about teaching are at the core of teachers' professional identities and classroom decisions.

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Footnotes

1. Configural invariance was first assessed by performing identical CFA models separately for each sample: (US: $\chi^2_{(419)} = 1201.94$, $p < .001$, $\chi^2/\text{df} = 2.87$, CFI = .87, RMSEA = .08; Swiss $\chi^2_{(419)} = 1023.68$, $p < .001$, $\chi^2/\text{df} = 2.44$, CFI = .93, RMSEA = .05). Then, a fully constrained multigroup model was tested: $\chi^2_{(882)} = 2439.01$ [$\chi^2_{\text{US}} = 1341.56$, $\chi^2_{\text{Swiss}} = 1097.44$], $p < .001$, $\chi^2/\text{df} = 2.77$, CFI = .87, RMSEA = .07. Comparison of this later model with the final model using the Satorra-Bentler scaled difference test (Satorra & Bentler, 2001) indicates a significant improvement in model fit: $\chi^2_{(6)} = 370.97$, $p < .001$.
2. Configural invariance was first assessed by performing identical CFA models separately for each sample: (US: $\chi^2_{(296)} = 553.55$, $p < .001$, $\chi^2/\text{df} = 1.87$, CFI = .94, RMSEA = .04; Swiss $\chi^2_{(296)} = 483.95$, $p < .001$, $\chi^2/\text{df} = 1.64$, CFI = .92, RMSEA = .04). Then, a fully constrained multigroup model was tested: $\chi^2_{(300)} = 941.62$ [$\chi^2_{\text{US}} = 456.88$, $\chi^2_{\text{Swiss}} = 484.75$], $p < .001$, $\chi^2/\text{df} = 3.14$, CFI = .86, RMSEA = .07. Comparison of this later model with the final model using the Satorra-Bentler scaled difference test (Satorra & Bentler, 2001) indicated a significant improvement in model fit: $\chi^2_{(5)} = 331.66$, $p < .001$.
3. Again, configural invariance was first assessed by performing identical CFA models separately for each sample: (US: $\chi^2_{(8)} = 29.39$, $p < .001$, $\chi^2/\text{df} = 3.67$, CFI = .94, RMSEA = .07; Swiss $\chi^2_{(8)} = 8.03$, $p = 1$, CFI = 1, RMSEA < .01). Then, a fully constrained multigroup model was tested: $\chi^2_{(24)} = 123.08$ [$\chi^2_{\text{US}} = 72.08$, $\chi^2_{\text{Swiss}} = 50.59$], $p < .001$, $\chi^2/\text{df} = 5.13$, CFI = .82, RMSEA = .10. Comparison of this later model with the final model using the Satorra-Bentler scaled difference test (Satorra & Bentler, 2001) indicated a significant improvement in model fit: $\chi^2_{(14)} = 73.05$, $p < .001$.

Appendix A

Survey Constructs and Sample Items

Construct	Definition	Sample item
<i>Motivation</i>		
Intrinsic career value	Choosing teaching for intrinsic motives like interest	I like teaching
Teaching Ability	The extent to which one believes he/she has abilities to teach	I have the qualities of a good teacher
Enhance social equity	Choosing teaching to help the socially disadvantaged and raise their ambitions	Teaching will allow me to help underprivileged youth
Shape future of young people	Choosing teaching to influence young people's values	Teaching will allow me to influence the next generation
Make social contribution	Choosing teaching to offer a service to the society and contribute to it	Teaching will allow me to provide a service to society
Work with young people	Choosing teaching to work with young people and help them grow	I want a job that involves working with young people
Job security	Choosing teaching to get a secure job in terms of reliable income and path career	Teaching will provide a secure job
Time for family	Choosing teaching to get more time for one's family life and commitments (quality of life)	Teaching hours will fit with the responsibilities of having a family
Opportunity	Choosing teaching by opportunity	I simply go the chance to teach
Teaching experiences	Perception of past experiences as a learner or in a teaching role	I have had inspirational teachers
Social influences	Perception of the extent to which one has been encouraged or persuaded to go into teaching	My colleagues/friends/family thought I should become a teacher
Social dissuasion	Perception of the extent to which one has been dissuaded to go into teaching	Did others tell you teaching was not a good career choice?
<i>Perceptions of teaching</i>		
High demand	Perception of teaching as being demanding emotionally/heavy workload	Do you think teachers have a heavy workload?
Expert career	Perception of teaching as requiring high levels of specialized knowledge	Do you think teaching requires high levels of expert knowledge?
Good salary	Perception of teaching as a well-paid job	Do you think teaching is well paid?
Social status & Teacher morale	Perception of teaching as socially respected and high-status career	Do you believe teachers are perceived as professionals?
<i>Instructional beliefs</i>		
Constructivism	Learning is an active process of knowledge and competence acquisition	My role as a teacher is to facilitate students' own inquiry
Direct instruction	Teacher's role is to transmit knowledge	Effective teachers demonstrate the correct way to solve a problem

Self-Determination, Deviance, and Risk Factors

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Abstract

Deviant behaviours are a significant cost to Canadian society and can incur an immeasurable amount of emotional and physical damage every year (Office of the Parliamentary Budget Officer, 2018; The John Howard Society of Canada, 2018). There have been numerous studies on the role of risk factors in affecting deviant behaviours, however, few of these have examined the influence of self-determination on deviance (Mann et al., 2010; Murray & Farrington, 2010; Zara & Farrington, 2010). This study intends to fill this gap by investigating the interactions between self-determination, gender, risk factors, and deviance. Participants were invited through the University of Saskatchewan's PAWS and SONA systems to complete an online survey that asked questions relating to gender, self-determination, risk factors, and deviance. A Chi-square Test for Independence was utilized to explore the explicit relationships between the type of self-determination and gender differences. In addition, a two-way MANOVA was used to compare self-determination and gender together in relation to deviance and risk factors. A Chi-square test found that there was not a significant relationship between gender and self-determination while the two-way MANOVA found a significant interaction effect between self-determination, deviance, and risk factors. However, when the interaction was examined further through univariate ANOVAs, no significant differences were found. Future research that examines and expands on the relationship between self-determination, gender, risk factors and antisocial behavior is suggested.

Keywords: antisocial behaviours, deviance, gender, risk factors, self-determination

Understanding deviant behaviour and why individuals engage in it is crucial to provide effective prevention, assessment, and treatment of such behaviours. While there are various definitions of deviant or antisocial behaviour, these behaviours typically involve any type of behaviour that is considered harmful (i.e. lying, bullying, skipping work, assault, etc.), goes against the generally agreed-upon norms in society, and that elicits a negative response (Cho et al., 2010; Reavy, Stein et al., 2012). For this study, the terms antisocial and deviant will be treated as interchangeable.

Deviant behaviour has several undesirable consequences for society and on individuals – the financial, emotional, and potentially physical effects on victims, the financial cost of treatment, and the cost of preventative measures throughout society (i.e., security measures), just to name a few. By increasing the collective understanding of why individuals engage in antisocial behaviours, society can provide more effective preventive, assessment, and treatment techniques that target these behaviours. Both criminal and non-criminal deviant acts can have huge detriments on society, including financial, emotional, and physical impacts, as the most apparent consequences of these behaviours.

The purpose of this study is to understand how self-determination (otherwise known as motivation), gender, deviance, and risk factors are intertwined. The objectives of the study are i) to determine if there is a significant relationship between each of the types of self-determination (autonomous, controlled, and impersonal) and gender and ii) how do the types of self-determination orientations (autonomous, controlled, and impersonal) and gender interact with the number and severity of deviant acts an individual engages in, and the amount of risk factors present for each individual. While there has been a multitude of research done on risk factors that may lead an individual to a criminal lifestyle, the impact of self-determination, along with gender, have not been widely researched in this way (Mann et al., 2010; Murray & Farrington, 2010; Zara & Farrington, 2010).

Self-Determination Theory

Conceptually, Self Determination Theory (SDT) began as an exploration into intrinsic motivation, which at the time contrasted with behaviourist notions of motivation (Deci & Ryan, 1980a; 1980b). As SDT developed, early theoretical understandings of intrinsic and extrinsic motivation evolved (Deci & Ryan, 1985). This concern with how individuals organized their actions saw the advancement of the four main tenants of SDT that are most fundamental to the theory. First, that the type of motivation an individual holds is more central in predicting outcomes than the amount of motivation; second, there are three basic, universal human psychological needs related to motivation - competence, autonomy, and relatedness; third, there are three types of motivation orientations or regulatory systems – autonomous, controlled, and impersonal, and three corresponding types of motivation – intrinsic, extrinsic, and amotivation; and fourth, that all people have each of the motivation orientations, but to varying degrees, and that each individual typically has more of one type than the others (Deci & Ryan, 1985; 2000; 2008a; 2008b; Ryan & Deci, 2019; 2020).

Intrinsic motivation involves participating in activities because they are inherently interesting and satisfying to the individual, rather than due to separate, external outcomes. Intrinsic motivation is considered by Deci and Ryan (2000) as a volitional, or self-determined activity. Intrinsically motivated activities are often done to meet the innate, basic human psychological needs of competence, autonomy, and relatedness.

According to Deci and Ryan (1985; 2000; 2008b), individuals participate in extrinsic behaviours to attain a separate, external outcome. More specifically, Deci and Ryan (2000) identified four types: external regulation, introjection, identification, and integration, which exist on a spectrum of motivation and locus of control.

Amotivation is regarded by Deci and Ryan (1985; 2000) to be the absence of motivation. Deci and Ryan (2000; 2008a) continued on to explain that amotivation occurs when an individual does not value an activity, does not perceive that they are competent enough to accomplish it, or that they do not believe a behaviour will result in a desired outcome. Deci and Ryan (1985) also liken amotivation to depression or other periods of low interest and energy.

Further, SDT postulates that there are three basic, innate psychological human needs required for effective functioning and psychological health— competence, autonomy, and relatedness (Deci & Ryan, 2000; 2008b; Ryan et al., 2019). The presence or absence of each of these needs also influences an individual's motivational orientation. Previous research has supported the existence of these needs, and that they are consistent across cultures and worldviews (Deci & Ryan, 2008b).

Competency is largely known as the feeling that one can successfully and efficiently complete a task or activity. Autonomy is commonly known as “the ability for one to make their own decisions”. Both competency and autonomy can be increased through positive feedback and choice, and thwarted by negative feedback and rewards based on task performance. Finally, relatedness provides us with a sense of belongingness to a person, group, society, or culture (Deci & Ryan, 2000).

Motivational Orientations

While there are three main types of motivation, intrinsic, extrinsic, and amotivation, according to Deci and Ryan (1985) there are also three types of motivational orientations which guide said behaviours. These orientations are all-encompassing and include an individual's beliefs, attitudes, and perceived locus of control. The motivational orientations theorized by Deci and Ryan (1985) are autonomy orientation, control orientation, and impersonal orientation. Most individuals have aspects of each of the three orientations, however, individuals have differing levels of each of the orientations (Deci & Ryan, 1985). It is more accurate to describe the orientations as sliding scales rather than determinant groups. Further, it is important to note that Deci and Ryan (1980a; 1980b; 2000) hypothesized that the type of motivation, more so than the amount of motivation, is what guides our actions and behaviours.

In the autonomy orientation, individuals participate in activities in correspondence to their values and their own volition (Deci & Ryan, 2008b). These individuals are driven by their need for personal satisfaction and competence, hence they tend to organize their priorities based on their personal goals and interests. They also choose to seek out opportunities that strengthen their autonomy, competence, and relatedness to others such as jobs that require a high level of initiative and have a large amount of freedom (Deci & Ryan, 1985; 2000; 2008b). As reasonably expected, intrinsic motivation is an example of someone behaving in an autonomous way (Deci & Ryan, 2008b). However, there are also autonomous forms of extrinsic motivation. These are similar to intrinsic motivation in their volitional nature, except that extrinsic autonomous motivation is not organized around enjoyment or interest. Rather, extrinsic autonomous motivation is integrated and identified based on the perceived worthiness or value of the activity to the individual (Ryan & Deci, 2020).

In this sense, Ryan and Deci (2020) postulate that various forms of extrinsic self-regulatory systems exist, including external regulation, introjection, identification and integration. These self-regulatory systems co-exist along an autonomy continuum, with identification and integration regulations being influenced by an increase in autonomy and perceived value of the activity. As such, identification and integration are considered to be aspects of extrinsic autonomous motivation. High autonomy then, has been shown to lead to several positive life outcomes, such as better psychological, social, and physical well-being, higher self-esteem, better learning, greater work satisfaction and relationship outcomes and that this occurs across many distinct and varied cultures (Baard et al., 2004; Chirkov & Ryan, 2001; Chirkov et al., 2003; Deci et al., 1989; Deci & Ryan, 2008a; Lynch et al., 2005; Sheldon et al., 2004).

In the control motivation orientation, individuals act on extrinsic motivation and engage in behaviours that are controlled through external pressures, leaving them to have an external locus of control, and lack volition and agency (Deci & Ryan, 1985). These individuals view factors such as pay and status, for example, as very important when making decisions or choosing jobs (Deci & Ryan, 2000; 2008b).

Finally, the impersonal orientation involves individuals that believe they cannot regulate or determine their own behaviour, and who tend to view outcomes to be independent of their behaviour (Deci & Ryan, 1985; 2000). Individuals that suffer with depression and/or anxiety often have these cognitions and may believe that they are unable to control or change their situation. These individuals often follow expectations, not because they are controlled by them, but because they lack the intentionality needed to do something different (Deci & Ryan, 1985). Again, it is important to re-iterate that individuals do not solely fall into one of these three categories. Everyone has components from each of these categories, however, according to Deci and Ryan (1980a; 1980b; 2008b), we tend to be higher on the scale for one of these types than the others. Deci and Ryan (1980a, 1980b; 1985; 2000) also hypothesized that there is a range of different phenomena that are related to an individual's motivation orientation, including, but not limited to, their perceived locus of control, perceived competence, the presence or absence of salient rewards, and self-esteem.

Gender and Deviant Behaviour

As mentioned previously, a significant difference between males and females engaging in criminal activities has been observed consistently for decades (Steffensmeier & Allan, 1996). Recently, females have been reported to account for approximately 25% of the police-reported crime in Canada (Savage, 2019). According to LaGrange and Silverman (1999), gendered differences are partially due to males generally maintaining a lower level of self-control and having higher amounts of potential opportunities. These researchers defined low self-control to include risk-seeking, impulsivity, temper, being present-oriented and careless, which in turn, can align with some of the characteristics in Deci and Ryan's (1985, 2000) controlled and impersonal orientations. Other researchers have found that certain risk factors, such as attention deficits, attachment to peers, depression, and childhood maltreatment influenced males and females differently (Abajobir et al., 2017; Daigle et al., 2007). Extrapolating from this, since there are fundamental differences in the critical risk factors for males and females, it could be theorized that males and females are likely to represent different self-determination orientations, with males showing dominance in the control and impersonal categories, and females in the autonomous category.

Risk Factors and Deviant Behaviours

Risk factors are generally described as “those characteristics, variables, or hazards that, if present for a given individual, make it more likely that this individual, rather than someone selected from the general population, will develop a disorder” (Mrazek & Haggerty, 1994, p. 127). Any number of risk factors can increase an individual’s chance of engaging in deviant and/or criminal behaviour, however, they do not determine if someone will engage in those behaviours with any certainty whatsoever. Nevertheless, with each additional risk factor an individual has, the likelihood that they may participate in deviant behaviours increases (Shader, 2001). Self-Determination Theory postulates that if the offender’s needs are met in a pro-social way, the offender’s motivational orientation may shift and they will begin to engage in society in more prosocial ways. Subsequently, it could be predicted that an individual’s specific motivational characteristics could act as a risk factor for engaging in deviant behaviours.

Methods

This study explores the relationship between each self-determination category (autonomous, controlled, and impersonal) and gender. This includes examining the effect of gender on each of the types of self-determination, as well as investigating the interactions between the type of self-determination orientation and gender with the number and severity of deviant acts an individual may engage in and participant’s amount of risk factors. There are three hypotheses. First, there will be a significant relationship between gender and self-determination. More so, it is hypothesized that the autonomous orientation will be made up primarily of females, while the other two orientations (controlled and impersonal) will primarily consist of males.

Relating to the second research question, it is theorized that there will be a significant relationship between an individual’s type of motivation orientation and their engagement in deviant activities. In particular, it is hypothesized that the control and impersonal orientations will result in higher amounts of deviant behaviours. Further, it is postulated that not only will the control and impersonal orientations lead to more antisocial behaviours, but they will also lead to more extreme antisocial behaviours as well. Finally, it is also hypothesized that gender will interact with self-determination and deviance decreasing the strength of the relationship between the amount of self-determination and deviance for females.

Lastly, it is theorized that there will also be a significant interaction between the motivational orientations and the number of risk factors present. Specifically, it is hypothesized the controlled and impersonal orientations will result in higher amounts of self-reported risk factors. Gender is again hypothesized to interact with this relationship, decreasing the strength of the relationship between the amount of self-determination and risk factors for females.

Participants

The participant sample was derived from undergraduate students who were 18 years or older and were enrolled at the University of Saskatchewan. Participants completed an online self-report survey through Survey Monkey and were compensated with either bonus credits or a chance to win a gift card. The University of Saskatchewan’s PAWS and SONA systems was utilized to recruit the participant sample. Participants were ensured that their data would be de-identified and kept strictly confidential. As well, participants were informed that they could quit the study and ask to have their data withdrawn at any time, without any consequences, and would still receive appropriate compensation for their time. Finally, participants received a full explanation of the study and its’ importance before they were given the opportunity to electronically sign an informed consent or to cease with the study. Once the informed consent

process was complete, student participants were then welcomed to complete the survey package. The online survey consisted of four parts: demographic information, the General Causality Orientations Scale, a modified version of the Delinquent Activities Scale, and a modified version of the Violence Risk Scale. The survey package took approximately 15 minutes to complete.

Measures

Self-Determination. The General Causality Orientations Scale - 17 item version (GCOS) was used to measure a participant's relative degree of autonomy, controlled, and impersonal orientations (Deci & Ryan, 1985). The GCOS is a survey that consists of a number of vignettes and three items for each vignette. Each of the three items corresponds with a motivation orientation. The participant is instructed to read the vignette and then rate how likely they would be to respond in each of the three ways on a Likert scale from 1 – 7 (1 being least likely, 7 being most likely). Ultimately, within each vignette, the respondent is indicating how likely they would be to respond in an autonomous, controlled, and impersonally consistent manner. At the end of the survey, respondents are given a score for each of the orientations. The GCOS has been shown to be internally consistent ($\alpha = .75$), have good test-retest reliability ($r = .74$) over two months, and behave as expected in correlation with other theoretically related constructs (Deci & Ryan, 1985).

Deviant/Antisocial Behaviours. The Delinquent Activities Scale (DAS), which is used as a binary self-report measure of delinquency, was used as a baseline source for identifying the amount and severity of deviant behaviours (Reavy et al., 2012). However, since the current study is more concerned about deviant rather than criminal behaviours, this scale was modified slightly to match the needs of this study. Severely antisocial items such as “been involved in gang fights” were changed slightly to more pertinent items such as “been involved in multiple fights” and items such as engaged in any other potentially minor illegal or deviant activities that have not been discussed above (i.e. drinking in public, not following posted rules, parking in no-parking areas) were added in order to supplement the questionnaire. Participants were instructed to indicate if they either have or have not participated in the given activities in the last 12 months. The DAS does not account for how frequently an individual participates in the same activity.

The amount or frequency of deviant behaviours was found by calculating the mean number of times any given participant answered *yes* to engaging in any of the activities. In order to assess for severity, items from the DAS were weighted according to current Canadian penalties, such as getting a warning for skipping work to a fine for distracted driving to incarceration for dealing drugs or theft, by separating them into five categories (Government of Canada, 2019). Participant's answers were coded, into one out of the five categories. Finally, the mean severity of behaviours was calculated for each participant with the coded values.

The DAS has been shown to have an internal consistency of $\alpha = .69$ for generalized delinquency and significant test-retest reliability ($r = .204$, $p = .006$). The researchers did note, however, that the low retest score could be due to a number of factors: a long retest interval (eight months), intervening treatments, or that the scales were intended to measure current and easily changeable behavioural patterns, not relatively stable personality traits. The DAS showed evidence of good construct validity when examined in relation to other relative factors (Reavy et al., 2012; Reavy et al., 2014). An analysis was run on the revised version of the DAS used for this study which revealed an internal consistency of $\alpha = .82$ for generalized delinquency.

Risk Factors. To assess the role of self-determination as a risk factor, its' relationship to other risk factors was considered to examine its' convergent validity. In order to measure convergent validity, participants completed the Violence Risk Scale (VRS) (Lewis et al., 2012). The VRS consists of 6 static and 20 dynamic factors, which are rated on a Likert type scale from 0 (very rarely) – 3 (very often). Typically, the items on this scale are rated by clinicians, but for the purpose of this study, they were self-reported by participants. Similar to the DAS, since the current study is interested in deviance in the general population, rather than violent behaviours in criminal populations, some of the VRS items were modified slightly. For example, items such as “prior release failures” and “security level at release” were removed from the survey, while more pertinent risk factors examining participants' outlook on education and family stress were added. The VRS acts as a strong primary source for the identification of other possible risk factors, with an internal consistency of $\alpha = .93$ and interrater reliability of $r = .93$ and $r = .84$ (Gordon, 1998; Wong & Gordon, 2003; 2006). The VRS has also been shown to be successful in predicting recidivism anywhere from 1 to 4 years later (Wong & Gordon, 2006).

Data Analysis

To investigate the research questions, two distinct data analysis methods were used. A Chi-square analysis was chosen due to its' non-parametric characteristics, which “allows us to make inferences about population frequencies from sample frequencies” (Evans, 1992, pg. 309). Chi-square is also used to test the frequencies of categorical variables, meaning that it compares the expected outcome to the observed outcome (Evans, 1992). A Chi-square Test for Independence was undertaken to analyze if self-determination and gender are dependent.

A two-way MANOVA was also chosen as a method of analysis due to its ability to compare multiple independent variables with numerous levels to multiple dependent variables. For the MANOVA, the independent variables were the type of self-determination, which is comprised of three levels: the autonomous orientation, the control orientation, and the impersonal orientation, and gender, which has two levels: female and male. The dependent variables were the number of deviant behaviours engaged in, the severity of the deviant behaviours engaged in, and participant's scores on the VRS. By examining participant's scores on the VRS, it is possible to observe the interactions between self-determination, gender, deviance and other well-known risk factors to have a more complete view of the relationship between self-determination and deviance.

As part of the data analysis, the statistical assumptions for a MANOVA were checked to see if they were met (Field, 2013). Box's Test of Equality of Covariance was used to determine that the assumption of homogeneity of covariance matrices was met. Levene's Test of Equality of Error Variances was also checked for non-significance ($p < 0.5$). Multivariate normality of residuals and random sampling have also been assumed. Finally, Wilk's Lambda was chosen to determine the differences of variances between groups.

Results

The results presented examine the interactions between type of self-determination orientation (autonomous, controlled, and impersonal), gender, the number and severity of deviant acts an individual may engage in, and participant's amount of risk factors. An individual's self-determination orientation was measured by the General Causality Orientation Scale (GCOS) (Deci & Ryan, 1985), while the number and severity of deviant acts were measured through

the Delinquent Activities Scale (DAS) (Reavy et al., 2012), with an individual's amount of risk factors measured by the Violence Risk Scale (VRS) (Wong & Gordon, 2003).

442 individuals participated in this study. However, eight participants requested for their data to be withdrawn and two participants were excluded from the data analysis as they were under 18 years of age, leaving 432 participants. Descriptive statistics including gender, age, ethnicity, year of study, and program of study were collected in order to be able to describe the sample population in detail. The remaining sample ($N=432$) was predominantly female (77%, $N = 333$), Caucasian (64%, $N=275$), in either their first (26%, $N=111$) or second (28%, $N=119$) year of university, in either Arts (33%, $N=142$) or Science (37%, $N= 157$) as their field of study, and had a median age range of 18-24 years with age groupings ranging from 18 to 54 years. After assessing demographic information, 18 participants were removed due to a significant amount of missing data and nine participants were removed for having scores over three standard deviations above the test means for the number of deviant acts, the severity of deviant acts, and the number of risk factors. Finally, participants who identified as “non-binary” ($N=5$) were removed from the data population due to the low numbers and because this research was primarily interested in differences between individuals who identified as male or female, leaving 400 participants to be included in the analysis. Since the removed participants were a part of the population sample, they were included in the demographic statistics. The outliers were identified through a box plot graph and data points were excluded from the Chi-square Test for Independence and the MANOVA analysis.

In determining if there is a significant relationship between each of the types of self-determination (autonomous, controlled, and impersonal) and gender a Chi-square Test for Independence was conducted. The Chi-square Test for Independence was not significant for self-determination and gender, $\chi^2(2, N = 400) = 1.33, p < .05$. The findings indicate that self-determination and gender are independent.

A two-way MANOVA was conducted to ascertain how self-determination orientations (autonomous, controlled, and impersonal) and gender interact with the number and severity of deviant acts an individual engages in and the amount of risk factors present for each individual. Since a MANOVA is the intended method of analysis, the MANOVA assumptions were checked. Box's Test of Equality of Covariance Matrices was not significant ($p = .119$), meaning that the assumption of homogeneity between groups was met for this analysis. Levene's Test of Equality of Error Variances ($p < .05$) also showed non-significant results in all three variables assessed (number of deviant acts; $p = .893$, severity of deviant acts; $p = .447$, and the number of risk factors; $p = .855$), further supporting that the assumption of homogeneity between groups had been met. Due to the sample size, the assumptions of multivariate normality of residuals and random sampling are assumed.

Pillai's Trace is used to determine the differences of variances between groups, as all the assumptions of a MANOVA were met but the sample sizes were unequal. According to Field (2013) in such situations, Pillai's Trace is the most robust test statistic when working with unequal sample sizes when the MANOVA assumptions are met.

In Table 1 the composite scores for self-determination by gender show a significant interaction effect (Pillai's Trace = .056, ($F = 9, 1191$) = 2.538, $p = .007$, $\eta^2 = .019$). The effect of self-determination on the dependant variables is significant (Pillai's Trace = .032, $F(6, 792) = 2.153, p = .046$, $\eta^2 = .016$), meaning that self-determination accounts for 1.6% of variance in deviance and risk factors. When between-subject tests were run, the interaction between self-

determination by gender and the number of deviant acts is shown to be significant $F(3, 397) = 3.38, p = .018, \eta^2 = .025$.

Table 1
MANOVA Results

Variable		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Self-Determination	Pillai's Trace	.032	2.153	6.000	792.000	.046*	.016
	Wilk's Lambda	.968	2.148	6.000	790.000	.046*	.016
	Hotelling's Trace	.033	2.143	6.000	788.000	.047*	.016
	Roy's Largest Root	.019	2.504	3.000	396.000	.059	.019
Gender	Pillai's Trace	.021	1.373	6.000	792.000	.223	.010
	Wilk's Lambda	.979	1.371	6.000	790.000	.046*	.016
	Hotelling's Trace	.021	1.370	6.000	788.000	.224	.010
	Roy's Largest Root	.016	2.169	3.000	396.000	.091	.016
Self-Determination x Gender	Pillai's Trace	.056	2.538	9.000	1191.000	.007*	.019
	Wilk's Lambda	.944	2.541	9.000	961.477	.007*	.019
	Hotelling's Trace	.058	2.536	9.000	1181.000	.007*	.019
	Roy's Largest Root	.036	4.731	3.000	397.000	.003*	.035

* $p < .05$

The separate univariate ANOVAs in Table 2 indicate non-significant self-determination effects on the number of deviant acts $F(2, 397) = 1.91, p = .150, \eta^2 = .01$, the severity of deviant acts $F(2, 397) = 1.47, p = .231, \eta^2 = .007$, and the amount of risk factors present $F(2, 397) = .461, p = .631, \eta^2 = .002$. Field (2013) explains that this phenomenon is due to the multivariate test considering the correlation between dependant variables, meaning MANOVA, rather than univariate ANOVAs, has more power to determine group differences. The effect of the dependant variables on self-determination are further examined in a discriminate function. Gender did not show a significant interaction (Pillai's Trace = .021, $F(6, 792) = 1.373, p = .223, \eta^2 = .01$).

Table 2*Univariate Analysis of Variance: F Ratios for Three Dependent Variables*

Variable	Self-Determination	Gender	Self-Determination x Gender
	(F _{2, 397})	(F _{2, 397})	(F _{2, 397})
Number of Deviant Acts	1.91	.831	3.38*
Severity of Deviant Acts	1.47	.284	2.11
Amount of Risk Factors Present	.461	1.57	1.63

*p < .05

A discriminant analysis was run on self-determination to further examine which level(s) or predictor variable(s) significantly affects the dependant variables. This analysis revealed two discriminant functions as seen in Table 3. The first function explained 67.3% of the variance, with a canonical $R^2 = .0038$, while the second function explained 32.7% of the variance, with a canonical $R^2 = .0018$. Together these discriminant functions did not significantly differentiate the groups (Wilk's $\Lambda = .994$, $\chi^2(6) = 2.30$, $p = .890$). As displayed in Table 4, removing the first function also indicated in a non-significant result (Wilk's $\Lambda = .998$, $\chi^2(2) = .754$, $p = .686$). The discriminate function plot showed that the first function discriminated the autonomous orientation group from the control orientation group, and the second function differentiated the impersonal orientation group from the prior two. However, as previously noted, there were no significant differences found when comparing the two groupings. The F-ratios, means (M) and standard deviations (SD) for gender and self-determination are illustrated in Table 5. In all cases the means for number of deviant acts, severity of acts, and amount of risk factors present were slightly, though not significantly, higher for males than they were for females.

Table 3*Discriminant Function Analysis Eigenvalues*

Function	Eigenvalue	Percent of Variance	Cumulative Percentage	Canonical Correlation
1	.004	67.3	67.3	.062
2	.002	32.7	100.0	.043

Table 4*Discriminant Function Analysis Wilk's Lambda*

Test of Function(s)	Wilk's Lambda	Chi-square	df	Sig.
1 through 2	.994	2.301	6	.890
2	.998	.754	2	.686

Table 5*Observed Means and Standard Deviations for Gender and Self-Determination Groups*

Variable	Gender				Self-Determination					
	Male		Female		Autonomous		Controlled		Impersonal	
	M	SD	M	SD	M	SD	M	SD	M	SD
Number of Deviant Acts	.093	.075	.085	0.69	.087	.071	.088	.065	.081	.084
Severity of Deviant Acts	.165	.158	.138	.138	.146	.145	.145	.121	.121	.138
Amount of Risk Factors Present	.454	.164	.409	.160	.419	.163	.467	.156	.405	.141

* $p < .05$

Discussion

The purpose of this study was to first, examine the relationship between gender and self-determination and second, to explore the interactions between self-determination and gender, and risk factors and deviance. Self-Determination Theory from Deci and Ryan (1985, 2000, 2008b) served as the foundation for this study. The findings for the first research question, pertaining to the relationship between gender and self-determination examined through a Chi-square Test for Independence, found that gender does not significantly contribute to any one type of self-determination. This finding illustrates that neither males or females are more likely to be included in or contribute to any one particular orientation over the others. Therefore, the gender differential in deviance may not be influenced by a specific gender being generally more or less self-determined (i.e. autonomously motivated vs control motivated).

The second research question explored the relationship between self-determination and gender as independent variables, and deviance and risk factors as dependant variables. The findings for the MANOVA analysis indicated that there was a small but significant group difference for the effects of self-determination related to the number of deviant acts, the severity of deviant acts, and the number of risk factors present. However, upon further inspection, the findings for the follow up contrasts and discriminate analysis indicated there is not a significant difference between the levels of self-determination. This phenomenon occurs in research regularly, as MANOVA gives the original variable (i.e. self-determination) more power when considered all together as a MANOVA, than when it is considered after being split into three groups, as multiple ANOVAs (Field, 2013).

Although the effects were not significant, the general outcomes of this analysis are intriguing. Contrary to the hypothesis, the control and the impersonal orientation were not associated with a higher amount and severity of deviant behaviours. Rather, these orientations were only associated with more deviant behaviours for certain groups. Specifically, the control orientation was only associated with an increase in deviance for females, while increasing deviant behaviours was only associated with the impersonal orientation for males. The autonomous orientation was generally related to higher amounts and severity of deviance. However, it is important to note is that the male gender sample was also quite small when

compared to the female gender sample. The sample sizes of these groupings may also have an influence on the results found in this study.

Supporting effects for SDT in fulfilling basic psychological needs have been found in workplace, health care, sport, technological, and educational research (Ryan & Deci, 2019; 2020). When one's basic psychological needs and the internalization of autonomy and competence are thwarted, deviant behaviours among students (Niemic & Ryan, 2009; Ryan, & Deci, 2000) or in the workplace can occur (Manganelli et al., 2018). For example, Van Petegem et al., (2015) found that when parents exert a controlling parenting style their adolescent children experienced frustration in actualizing their need for autonomy which in turn can result in oppositional behaviors.

It was theorized by Deci and Ryan (1985) that those individuals who had or did not have specific life events (such as perceived loss of control or substantial emphasis on external rewards) would be more likely to be orientated in a certain way. The results from this study illustrate that an individual's orientation is not necessarily an indicator of the amount or type of risk factors a given individual has, or if they have or have not engaged in deviant behaviours. It could be that Deci and Ryan's (1985) factors of self-determination are distinctly different or not related to the risk factors reported or that the study's findings are unique to the measures used and subject sample derived

Implications

At the beginning of this study, it was posited that the results may be able to provide more insight into why people engage in deviant behaviours. Although a significant effect was found for the relationship between self-determination, deviance and risk factors, self-determination was only shown to account for 1.6% of the variance in deviance and risk factors. While this relationship is significant, it offers little real-world value. This research may help illustrate the domains in which self-determination has significant effects, such as in work and educational settings as previously shown, and in which domains, such as deviance, other factors may be involved (Baard et al., 2004; Deci et al., 1989; Deci & Ryan, 2008a; Lynch et al., 2005; Vansteenkiste et al., 2004).

As well as providing additional insight into deviant behaviours for educational or research purposes, it is also suggested that the findings could be used to enhance risk assessments and counselling tools. While there may be other mediating factors to address regarding deviance, self-determination has been shown to have a meaningful place within the counselling domain. Deci and Ryan (2008b) illustrated how utilizing self-determination in counselling can help clients to autonomously explore and create change. Deci and Ryan (2008b) discussed the practice of using self-determination to support motivational interviewing techniques, as well as ensuring client's three basic psychological needs are met. Finally, Deci and Ryan (2008b) advocate that integrating self-determination into the counselling process enhances the likelihood that treatment goals will be met and maintained.

Conclusion

Limitations

There are number of limitations to the current study. The first limitation of is that the sample population included unequal sample sizes, with the overall sample composed of a substantially greater number of undergraduate female participants. A second limitation is that the sample population was exclusively made up of University of Saskatchewan students which does not

necessarily represent the Saskatchewan or Canadian population. A third limitation is that participants were recruited using convenience sampling rather than random sampling. Consequently, the results of this study are not generalizable to populations outside of this participant group. A fourth limitation of this study is that some of the measures used were modified to fit the sample population better, and therefore may not have retained their original measures of validity and reliability. In addition, the VRS is a measure that is typically completed by trained professionals to assess violent offenders, but it was applied to a generally non-violent population in a self-report fashion.

Future Research

This study was exploratory in nature and future research should further investigate the underpinnings of self-determination theory and its' relationship to deviance in larger more representative populations. Recommendations for future research include replicating the study with a general or offender population and utilizing random sampling in order to ensure generalizability. As well, future research should examine what (if any) are the mediating factors in the relationship between self-determination and deviance. Finally, more research is needed into SDT and its application in areas outside of education, work, and personal attributes. In specific, investigations into deviance and risk factors are desired in order to better understand the applicability of SDT. Expanding the research on deviant behaviours will allow for a more informed work and a greater understanding of those who commit antisocial acts. The results of this study indicate that the relationship between SDT, deviance, and the influence of gender, is complex and may not mirror the effects that have been shown between self-determination and other concepts.

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“You Pray for Him a Bit More”: Young Adults’ Positive Aspects of Caregiving (PAC) Towards Parental Cancer

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Abstract

Young adult caregivers are growing in number, yet there is a paucity of literature on their role in informal family caregiving. The Positive Aspects of Caregiving (PAC) framework has been developed within Dementia carers to indicate positive outcomes of the caring experience. The current study specifically explored the narratives of four young adult carers' lived experience of caring towards their parents with cancer, using Interpretative Phenomenological Analysis (IPA) through the lens of PAC. Main themes developed from this study were unfolding the child-parent dyad, character building and affirmation of value systems, time reframed, and sustaining caregiving continuity with subthemes surrounding responsibility, appreciation beyond the role reversal, acceptance and sources of comfort. This small-scaled study contributes towards a new understanding of the young adult population, their perception of caregiving and briefly informs the PAC beyond a dementia population.

Keywords: caregiving, positive aspects of caregiving (PAC), Interpretative Phenomenological Analysis (IPA), parental cancer, young adult

Positive Aspects of Caregiving (PAC) seeks to explain experiences which result in caregivers perceiving positive outcomes from their caring role (Schulz & Sherwood, 2008). Such outcomes include the strengthening of relationships between the carer and the care receiver, increased self-esteem, and the ability to learn new skills (Schulz & Sherwood, 2008). Caregiving activities place additional daily demands upon the care giver and include managing the recipient's medication, emotional support, personal hygiene care or communications with healthcare professionals amongst others (Hooyman & Kiyak, 2005). Folkman (1997) identified when caring for their partners living with AIDS caregivers experienced both positive and negative emotions simultaneously. Amidst the adversity, caregivers were able to construct the caregiving journey with an enhanced sense of meaning.

PAC has been studied widely in family caregivers of individuals living with dementia (Yu, Cheng & Wang 2017; Lloyd, Patterson & Muers, 2016, Gaugler, Mittelman, Hepburn & Newcomer, 2010), schizophrenia (Chen & Greenberg 2004; Kate, Grover, Kulhara & Nehra, 2013), and cancer (Li, Mak & Loke 2012; Li & Loke, 2013; Kim, Schulz & Carver, 2007, Houldin, 2007). The first conceptual framework of Positive Aspects of Caregiving (CFPAC) was developed by Carbonneau, Caron and Desrosiers (2010) for dementia caregivers and was later adapted by Li and Loke (2013) in a review of literature for cancer carers. Central positive aspects within the model were improvement in self-efficacy, increase in relationship quality shared between caregiver-recipient, and personal meaning making. Both the CFPAC framework developed for dementia carers and its adaption towards a review of cancer carer literature, provided an insight to expanding the framework for inclusion of different carer groups and long-term illnesses.

Although the CFPAC was developed from several studies of family cancer carers, its foundation is that of the CFPAC in dementia caregivers (Carbonneau, Caron & Desrosiers, 2010). Dementia is an irreversible, progressive condition, and as such, there were aspects within the framework which were not applicable in the cancer caregiving population (Li & Murray, 2014). The experience and nurturance of hope is a trait prevalent in cancer carers in relation to better quality of life and death, alongside hope through religion and spirituality (Holtslander & Duggleby, 2009; Clayton, et al., 2005). Cancer carers also shared the need to persevere in their caregiving role to make the care recipient's life as normal as possible in every promising way (Whisenant, 2011).

Parental Cancer and Young Caregivers

In the last two decades, it is acknowledged that family members become “second-order patients” with specific needs of their own, as cancer affects the whole family ecosystem (Levesque & Maybery, 2012, p.397). Statistically out of seven million carers in the United Kingdom, 376, 000 are young adult carers aging from 16 to 25 years old (Carers Trust, 2015). Unfortunately, the current available support is aimed mainly towards young carers up to the age of 18, and this is reflected in 80% of young carers being concerned about continuing their caregiving role beyond 18, due to a perceived lack of support (Carers Trust, 2015). Lawton, et al. (1991), suggests various societal changes will mean caregiving roles in a family system will eventually become an intergenerational responsibility consisting of younger individuals. With growing numbers of young adults choosing to engage in marriages much later in their life and delayed childbearing, ill or aging parents will high likely be looked after by their children (Levine, et al. 2005). A paucity of literature currently exists on the experience of young adult children engaging in caregiving activities, particularly considering the typical need for autonomy at this point in life.

With parental cancer, young people mentioned feeling a sense of vulnerability towards themselves, and people around them (Finch & Gibson, 2009). The parent-child relationship starts being a threat, potentially through the perception of role reversal. Conversely, positive relationship attributes such as stronger family values, higher family cohesion and less conflict are also observed within adolescents' experiences towards parental cancer, along with the perception of personal growth (Pope, Baldwin & Lee, 2018; Gazendam-Donofrio et al., 2007).

PAC has been explored in spousal caregivers (Li & Loke, 2014; Porter et al., 2012; Kim et al., 2008; Hagedoorn et al., 2008), parent caregivers (Las Hayas, de Arroyabe & Calvete, 2014), and the elderly population (Houldin, 2007). It was highlighted by Levine et al. (2005), that within the caregiver population 12 to 18% are young adults. Therefore, the aim of our paper is to provide an understanding of the lived experience of the neglected population of young adult carers. As the mainstay of the current cancer literature takes a deficit approach, by using an exploration of PAC in the dyadic parent-child relationship we provide a positive lens through which understand young carers experiences.

Method

A qualitative approach was taken to understand our research question: "What are the positive aspects of caregiving of young adults' towards parental cancer?". We analyzed in-depth interviews via a guided interview schedule (Appendix A), using Interpretative Phenomenological Analysis (IPA) (Smith, Flowers, & Larkin 2009). IPA captured the core components of the caregiving experience on an individual level, including sense-making of their personal and social experiences. Additionally, IPA allows inclusion for pre-conceived knowledge during data collection resulting in a person-centred appreciation of participants' caregiving experience; explaining the double hermeneutics known as the theory of interpretation (Smith & Osborn, 2007: 53).

Participants

There were four participants in this study: three men and one woman, lacking a minimum two to meet the ideal six participant criteria for an IPA study (Smith, Flowers, & Larkin 2009). All participants were within the ages of 18 to 25 during the caregiving phase. Further demographic information can be found in Table 1. Participation in this study were voluntary and withdrawal from study were permitted at any time during the interview, or two weeks after data collection.

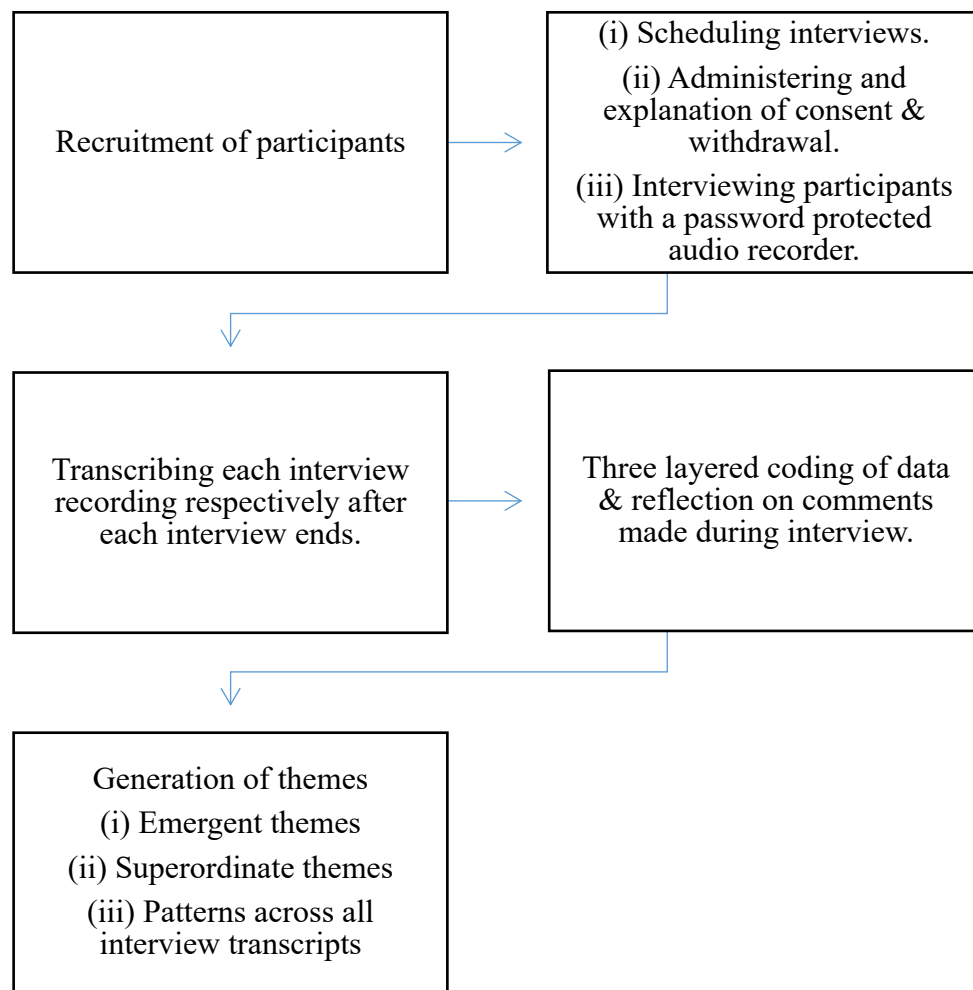
Table 1
Demographic Information During Caregiving Phase

Pseudonym	Age	Gender	Employment status	Caregiver status	Caregiving duration (years)	Status of parent
Lisa	18	F	Full-time student	Previously a caregiver	2	Mother, breast cancer survivor
Berklee	24	M	Part-time student	Previously a caregiver	1.5	Father, Kidney cancer, deceased
Jackson	23	M	Full-time employment	Previously a caregiver	1 month	Father, Liver cancer, Deceased
Bob	25	M	Full-time employment	Presently a caregiver	8	Mother, thyroid cancer

Data Collection

Ethical approval was gained from the university ethics board. Two datasets were collected through semi-structured interview sessions, while the other two were collected via a telephone interview; all interviews were audio recorded. Interviews lasted between 40 and 60 minutes per person. All audio recordings were transcribed verbatim prior to analysis. A summary of the data collection process is illustrated below (see Figure 1).

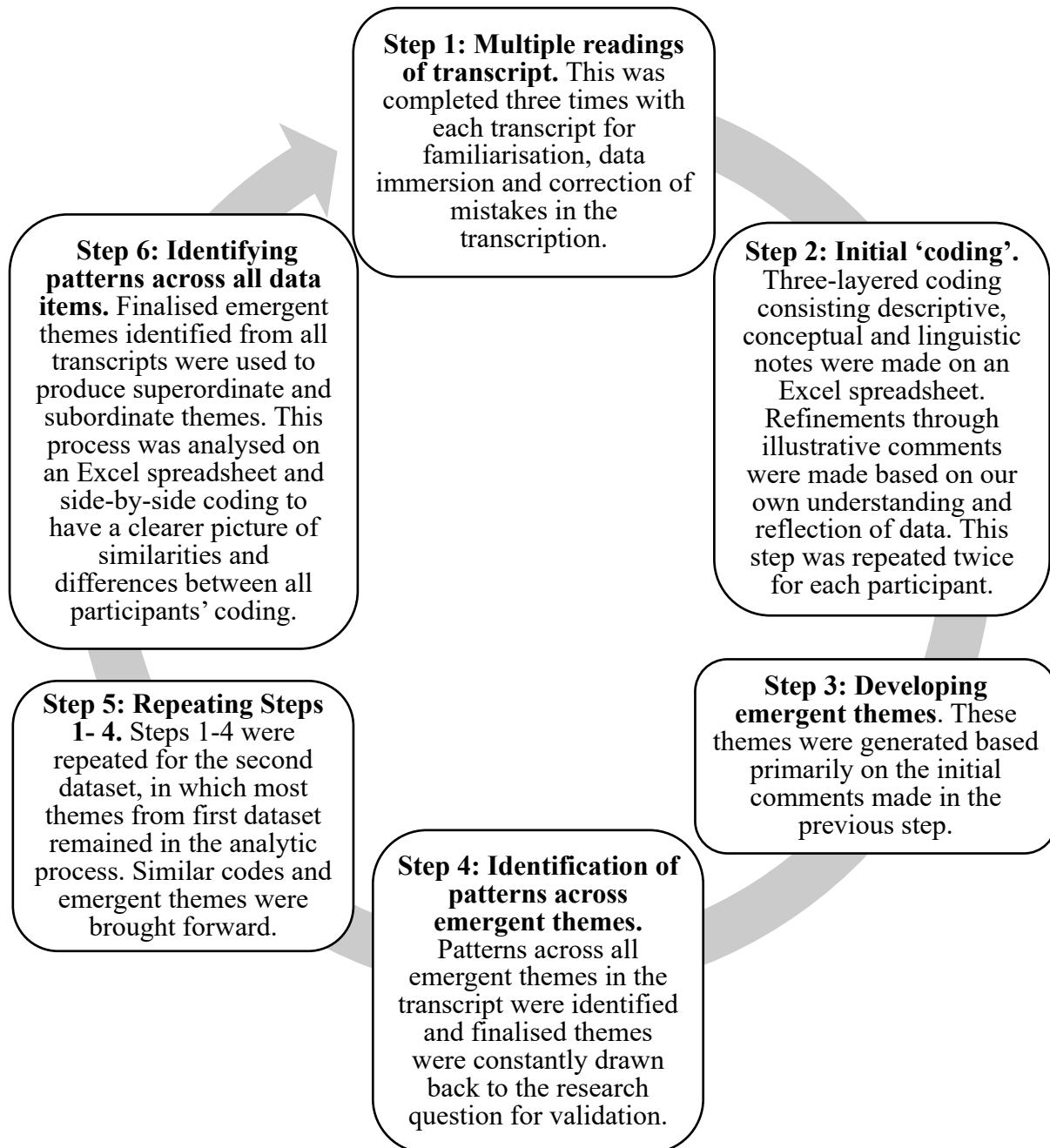
Figure 1
Flow Chart for Data Collection



Data Analysis

Our analysis followed the six step-by-step guidelines towards coding and analytic process by Smith, Flowers and Larkin (2009). Illustration below shows the coding processes (see Figure 2).

Figure 2
Data Analysis in Sequence

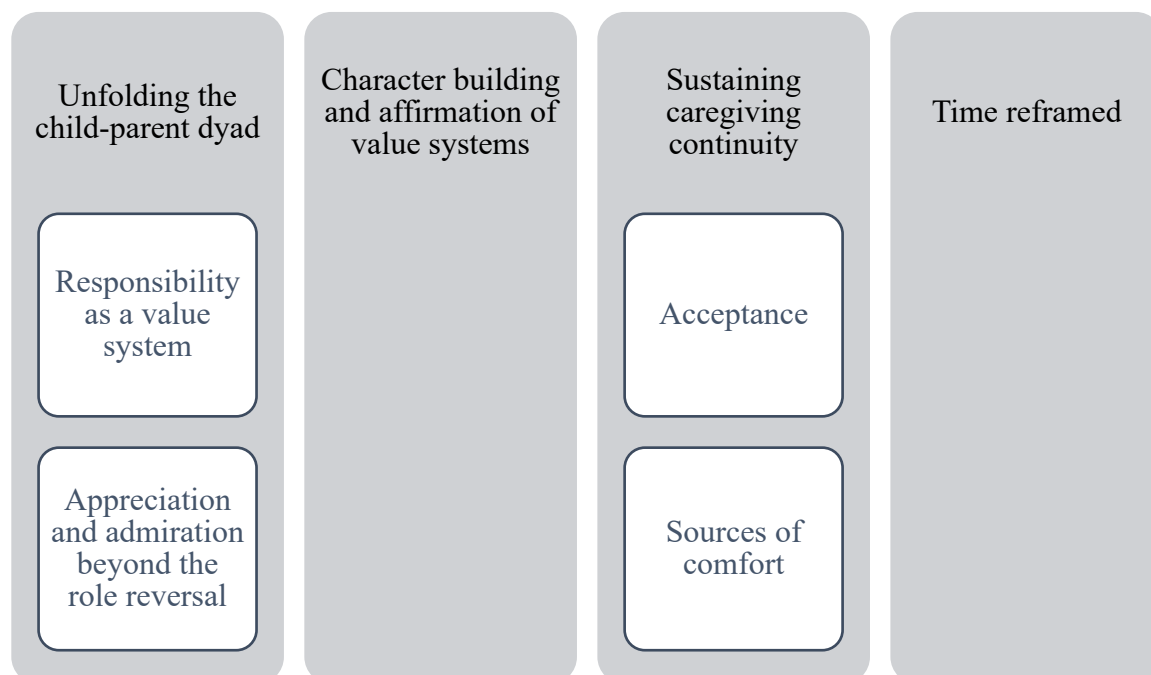


Findings

The analysis of the data revealed a detailed exploratory superordinate and subordinate themes related to PAC in young adulthood. The themes were: (1) unfolding the child-parent dyad, character building and affirmation of value systems, (3) sustaining caregiving continuity, and time reframed; of which themes (1) and (3) had two subordinate themes respectively. An illustration of the organised themes is seen in Figure 3 below.

Figure 3

Superordinate and Subordinate Themes Developed from IPA Transcript



Unfolding the Child-Parent Dyad

The most salient theme from all four interviews was focused on the relationship transaction between the caregiver and their parent. Nuance in experience is reflected in the two subordinate themes, describing the varied lived experiences across the participants.

Responsibility as a Value System

Lisa, Berklee and Jackson had taken up their role as young adult caregivers due to familial circumstantial reasons and thus, not allowing them to prepare themselves mentally or physically before taking up the role.

"[...] belonged to familial circumstances because my father was working most of the time, my brother was in another school... So, he barely had the time to come home and look after my mum. I was the only one available to take care of my mother so there was no choice." (Lisa)

"My dad will never request that (caregiving). My mum was getting tired. So, she was balancing her job and taking care of my dad. My younger brother was in national service, older brother was committed to his job. So, I was in the most flexible situation – my job requires me to stay home." (Berklee)

“No one asked me to do it. It is like a responsibility, it (caregiving role) just came along with it.” (Jackson)

Nonetheless, there was the shared perception that although the role was not a choice and was an exhausting undertaking, they were not forced into the role. Despite the discomfort, they had responsibilities to their ill parent, signaling a need to act in accordance with an internal value system. For Lisa, responsibility was highlighted twice in the aspects of a child-parent dyad and a gender specific, mother-daughter dyad due to the nature of her parent's cancer. Lisa felt that caring responsibilities would have caused even more discomfort to the other male family members in the household and she felt compelled towards the role despite her own discomfort.

“Most of the time it's because it's my mother, because of that – just because she is my mother, I have to do this. Nobody will do it except you because my father was working – he had to provide for us when my mum was on a break, my brother forever disappearing – he was still studying.” (Lisa on the child-parent dyad)

“After breast cancer you had surgery, you have to clean the pus and everything... I had no choice but to do it, because I'm female so my brother won't feel comfortable doing it, so I took on the role seeing that...” (Lisa on the mother-daughter dyad)

For Berkleee and Jackson on the other hand, although it was acknowledged that their relationship with their respective parents were not close; they did not feel forced towards their caring role. This was mainly due to the strong grounding for responsibility of a child towards a parent that they held on to as a value system. The gender specific caregiving transaction was present here too; while it was more physical for Lisa, there was a patriarchal reasoning for Berkleee when he considered the father-son transaction, whereby he felt there was the expectation of a male child to take on the caring responsibility. Responsibility to Berkleee was the centre of his entire caregiving journey; a driving factor, motivation and was gathered as the only reason to his successful fulfilment of the caregiving role:

“Because it's not an option. It's a responsibility. You can do things to be nice to people, you can be kind to one another, but responsibility is one value that cannot fall, and it was his responsibility to hold up the family and now it's my responsibility to hold up as much as I can.” (Berklee)

Appreciation and Admiration Beyond the Role Reversal

The second subordinate theme focuses on feeling valued and encouraged by their parent for the caregiving activities carried out and the reinforcement this provided to continue with the course of their caregiving journey. The norm is usually for a parent to care and provide in most aspects, however the role reversal though admitted as uncomfortable; as quoted by Berkleee, *“it was acknowledged that it was a role reversal and it was quite awkward, going into it”*; was also regarded later as a reason to better understand their parent resulting in greater respect for their parent; as quoted by Lisa, *“[...]cancer, cancer relapse...all of this, so it helped me like gain more respect for her. She's such fighter.”*

The following extracts describes the acknowledgement and appreciation three participants felt for their parent. Though Berkleee admitted that *“the relationship remains the same”*, in the child-parent transaction before and after the caregiving experience, it still provided the comfort needed possibly due to the absence of adaptation efforts required for both child and parent. In contrast, Lisa and Bob understood their mothers better and felt there was an improved child-

parent transaction compared to before the caregiving journey. It was a meaningful period for both these participants as they finally felt they could perform and achieve the expectations of their parent; with Lisa learning new skills and Bob gaining a new sense of maturity.

“I understood my mum better. She used to scold me a lot, but now realised it’s for my own good. I take it better now and my relationship with her has improved. I think she felt appreciative because she knew she couldn’t do it herself I think she felt really proud of me at that point of time.” (Lisa)

“I better understand my mother now, it is also because I have the maturity to understand the situation better now.” (Bob)

Character Building and Affirmation of Value Systems

This theme captures the extent to which their parental caregiving experiences as young adults have provided character growth and, a test and validation of their value systems. For Lisa, the caregiving process is said to have *“helped me to grow a lot”*. In comparison, Berklee when asked about personal development, there was a short but profound response of, *“nothing I don’t know about myself already”*. Jackson as the only child found himself *“to be more organized”*, and Bob strongly admits that the reason behind his caregiving *“is not responsibility, it’s just my love towards my mother as an eldest son”*; with further exploration from the extracts below:

“I feel more confident after he passed, I was able to organize everything; to make sure all procedures were done smoothly including the responsibility of carrying out a smooth funeral, and I feel I did a good job. I didn’t disappoint anyone, I hope.” (Jackson; post caregiving)

“Naturally wanted to do it. I had a thought if I don’t do it who will? If my father took care, will he do a good job? As an eldest son, I felt I should care for my mother. [...] emotionally I was drawn to taking up the role.” (Bob)

“[...] Self-esteem I used to be, in the past I used to be bullied in school, so my self-esteem was very low [...], so helping my mum helped increase it because I felt like I was wanted and needed at that point of time. So that actually helped me find a purpose ...” (Lisa)

Lisa described an increase in of self-esteem which in return gave her a better communication pathway, *“in a way it helped us communicate better”*. Although the caregiving transaction was taxing, it allowed for improvements of communication between Lisa and her parent. Bob with the longest caregiving years wondered if anyone else could care for his mother better; and later felt that *“main purpose was for her to feel good, but in the end, it made me feel better too”*. Overall, all participants experienced positive approaches to caregiving in terms of personal growth which aided a comfortable caregiving journey between the young adult and ill parent.

Time Reframed

Time as a theme was developed as a positive attribute of caregiving for three participants based on individual reasonings and self-reflection. Time, an objective yet abstract term was narrated differently by Lisa, Berklee and Jackson. However, they shared a mutual feeling that wasted time will never return.

“I did feel better, but it also made me feel like... I was taking life for granted, because here I was surrounded by cancer survivors, but they were so much more optimistic than me. Then there’s me wondering what I’m doing with my life... It helped me analyse my life and introspect.” (Lisa)

For Lisa, spending time with her mother through the first and second breast cancer caregiving journey had strong association towards becoming more aware of how she has taken previous chapters of her life very lightly. Lisa reflects upon herself when she meets other cancer survivors on how she would appreciate time better now.

“Well you don’t view time the same way anymore... most people are comfortable working 9-5, but now the idea you’re wasting your life away [...] becomes even more concrete. Because he was working all the way till the end, and I felt like ‘wow that’s not how I wanna go’. It’s more of a realisation to go after what you want, and I don’t want to be part of the rat race. I’m more confident now that if I don’t want to be a part of the rat race, I don’t have to be a part of it” (Berklee)

Living the unexceptional career cycle was an exposure that will cost time, in a negative connotation for Berklee. Having observed his father work the typical work cycle up till his cancer death bed was a wakeup call and confirmation that breaking out of the norm was necessary towards having a better perspective and utilization of the limited and mysterious living time we have.

“Yea, there was more open conversations. We know the time is counting, it’s worthless to continue arguing [...]. We just treasured our time and say as many things with honesty [...].” (Jackson)

For Jackson, witnessing time slipping by too quickly in the face of stage 4 liver cancer was a realisation that there was no point in keeping up with the arguments of the past. Experiencing the shortest caregiving period from all other participants, Jackson managed to be “*more expressive*” with his father although there was a said discomfort in the father-son relationship before, “*treasured time with family*”, and lastly admitted an increased “*quality of relationship*”.

The test of time at the expense of parental cancer provided a space for these participants to reflect how time was viewed differently in the past, and when passage of time becomes more salient; the need to embrace and make sure it is spent with great quality became a priority.

Sustaining Caregiving Continuity

This theme was established across all participants’ data and provided understanding towards how they sustained their caregiving journeys whether it was thru achieving and maintaining quality of life and death for both the ill parent and in the coming times, for themselves or through their social supports. The parental caregiving experience was a reality checker and gave the opportunity for future conceptualization through self-reflection.

Acceptance

Berklee’s excerpts below encompasses his caregiving journey with his father towards his death bed and later, made him accept that there are occurrences in the present which cannot be fixed. He hopes that the mentality to fix illness at the expense of life quality should be changed in the aim of providing quality of death to his ill parent. There was a sense of pressure for Berklee

and the hope his family members would understand his urge for a better experience of death for his father in accordance with his wishes. Being in his early twenties, Berklee projected strength and emotional empowerment to come to terms of not only the illness itself, but similarly to provide the last rights hoped for by his parent.

“It just shifted my mind set a bit more, that we shouldn’t fix everything. When he was going through the end phases, they always ask, ‘if you want to keep him alive...’ and I realise there was a lack of focus on dying peacefully, [...] feel like we should have focused on the time left, better. He got it at the end of day. After a while everyone realise ‘okay it’s time’ [...]. I guess everyone wanted to hold on at first. I felt we should make it a wonderful process as far as possible, let his passing be exactly how he wants it to be. Let’s not worry about ‘go for this surgery, try that medicine...’ It reached a point where I wanna know that I’ll be able to die peacefully as well... and not let my family have a say in the future while they try to keep me alive [...].” (Berklee)

“That dying is not a bad thing. You get comfortable with the idea of death in general I guess. You don’t fear it as much because [...] kinda know how you would prefer to go. [...].” (Berklee)

Lisa on the other hand had an entirely different experience to Berklee as she saw her mother survive through two diagnosis of breast cancer and later, double mastectomy. Therefore, her comprehension of death is about realising the possibility of it happening to anyone is extremely vivid through cancer, and often without any warning signs. Hence, emphasising the caregiving process forced her to face reality and, the journey *helps me to grow a lot*; which in return allowed her to focus more on aspects of life quality in her mother and for herself after surviving the cancer journey.

“Before being a caregiver, I think I took everything very lightly...like I thought death will not occur to the people around me. Then having my mum being diagnosed, seeing the process of her getting her breast cut off one by one, she cut off both.” (Lisa)

For Bob, making sure his mother does not engage in unhealthy rumination was his point of acceptance, due to its consequences towards her illness. Although this has been a long-term caregiving journey for Bob; accepting and reminding his mother to strive for quality of life instead of ruminating matters that are out of physical control was a continuous effort – for the long-term betterment of his mother.

“I observe her changes. I try to divert her mind by talking to her about other things. I just don’t want her to overthink, as it makes things worse for her illness.” (Bob)

“When she worries, I tell her as a human we are all going to die, but we don’t know when and that is the suspense. We just spend the time we have; we only have one life.” (Bob)

Jackson’s experience with caring for his father came with understanding for the first time what transpires in the journey towards accepting ones’ illness; a two-way journey for both parent and he as a caregiver. Besides that, there was a sense of calmness in the air for Jackson whose father engaged in religious beliefs towards achieving acceptance and oneness with the course of death peacefully. This, provided a secondary transference of acceptance for Jackson as

witnessing his father at peace with reality, allowed him to also be one with the course of illness and later, death.

“It’s really an important experience for me. I understood what goes through the stages of accepting the illness [...], it was valuable.” (Jackson)

“Through the journey it (religion) was helpful for my father as it allowed him to be at peace about his death. I’m not that spiritual or religious. To have something to believe and help you get over these tough times; [...] I am thankful for this. Because he was at peace about his course of death, I was in a better place ...” (Jackson)

There were different associations to acceptance; Berklee and Jackson emphasized the hope for quality of death while, Lisa and Bob hoped for improvement on quality of life. Berklee’s comprehension of quality of death meant ending pain for his parent, perhaps from the adversity of the cancer treatment and similarly placing significance concerning his parent’s hope to end the continuity of treatment. Lisa, on the other end saw her mother survived through the cancer journey twice and therefore emphasizes quality of life more as she hopes of making sure her mother lives a healthier and happier life moving forward. When comparing Jackson and Bob ; the shortest and longest caregiving period respectively, Jackson took solace in the fact that his father was first able to accept the cancer diagnosis and therefore he too was able to achieve acceptance to focus on a better caregiving journey; while Bob made sure that the uncertainty of life does not come in between living life to the fullest, even in the adversity of an illness because it was not worth the deterioration negative thoughts would contribute.

Sources of comfort

Comfort and support came from two main sources: religion for one participant and social network for three other participants. Religion was based on one participant’s lived experience, but it was acknowledged to be a strong positive attribute that could be recognized further. Berklee’s quotes below narrates a selfless and compassionate engagement towards his religious practice differing from before the caregiving journey began. While his *attitude towards religion never changed*; religion was an *outlet*, in wanting his parent’s *pain to end*, and the *ability to rest once and for all*.

“You tend to pray for him a bit more. But I don’t pray for him to be alive longer, I just prayed for what’s best. And in theory god knows what’s best for him I guess, then again... supernatural entities... he is supposed to know everything. That’s the sole thing you can do, I was in capacity to ask for him to be provided what god believes he deserves I guess.” (Berklee)

“Religion became a bit more present in my life, but it wasn’t significant to me, okay maybe it comforts me knowing that technically speaking he is being taken care of, so it was more of a relieve factor I guess.” (Berklee)

Religion for Berklee was positively perceived as a relief factor towards himself and in his perception, also an indirect relieve factor for his parent. Resorting to prayers brought a sense of calmness and a safe, reliable space to express himself. Helpless in his position considering the circumstances, turning to religion felt like the *sole thing you can do*. Berklee felt his engagement towards religion also allowed him to be at ease with the view that there is a superior entity who may understand the circumstances better, possibly also taking care of his parent.

In addition, some took comfort in their social support. A strong support system made the caregiving journey more meaningful. Participants provided contrasting accounts of their understanding of their support system with two participants not discussing social support at all, while for another two it was a solid component of their positive caregiving journey.

“It’s not a war for my family alone. There was a lot of friends around us so wasn’t alone, though some were annoying.” (Jackson)

“I have a great group of friends. Even when I’m not around they will come visit my mother. I would just give them a call and they would go over to see my mum, and sometimes they even go over when I have not said anything.” (Bob)

Jackson highlights that the presence of a strong support system made navigating the long parental cancer journey feel less of a solo effort, despite some elements of negative social presence. Similarly, Bob admits having been “very lucky” when it comes to the reliability of his social support system, that has been of great help when initiated, also when he would receive help voluntary without him having to request.

Discussion

Our aim for this article was to gain rich, in-depth exploration towards the lived experiences of PAC in young adults towards parental cancer. Four main themes and four subthemes were produced from this study. The development of these aspects in-line with expected experiences that would have been shared by other types of caregivers, saw participants sharing both their positive and negative experiences. The current study chose to fill the gaps of exploring the understudied young adult care provider population and its association towards parental cancer. Both gaps are discussed below in relation to the present findings of this article which contributes towards a new light of caregiving comprehension. The following discussion should be carefully considered as they were analyzed within a very small sample population that while it produced vital life-changing experiences, it did not fulfill the minimum six for an IPA study as suggested by Smith, Flowers and Larkin (2009).

The parent-child dyad largely surfaced in understanding the roles in reverse, focusing more on the young adult child towards their parent. Caregiving was a responsibility towards their parent and similarly, appreciation and admiration of their parent and themselves despite the role reversal. Finch and Gibson (2009) identified vulnerability of the caregiver as one of six dimensions in teenage caregivers’ perceptions of parental cancer diagnosis. Our study also highlighted vulnerability in young adults through the perception of change in family dynamics and adaptations in family roles. However, we found the role reversal was perceived positively through the value system of responsibility across all participants. The expectation to take care of family members conforms to social norms (Lee, Netzer & Coward, 1994), and therefore slipping into the caregiver role could have been perceived as the most natural action to do by these young adults.

The variation in experience for the participants within our study is both consistent and inconsistent with Levesque and Mayberry (2012)’s growth study, as most participants in this study managed an improved relationship with their ill parent, but one did not see a difference in their parent-child relationship. However interestingly for the latter, the nature of relationship shared before the caregiving transaction may have influenced the different caregiving experience with quality of relationship before the caregiving journey is shown to affect the

overall caregiving satisfaction (Lyonette & Yardley, 2003). With mixed findings, a larger sample study is essential to identify underlying factors which could explain relationship characteristics and its effect on caregiving experiences. Among spousal and adult caregivers, males were more likely than females to have positive caregiving experiences due to the prevalent social norm that men are not typically expected to participate in caregiving activities in comparison to women (Lin, Fee & Hsueh-Sheng, 2012). The young men and women in our study discussed noteworthy positive experiences from the caregiving itself although gendered experiences were not explored in specific within this study therefore supporting the need for further exploration.

A mutual theme across all participants described was the acceptance of their parent for who they are and admiration for their endurance. Along the lines of child-parent dyad, disclosure, or communication pertaining to the illness, caregiving experience was seen in even representation for this data set. While communication pertaining to daily caregiving duties were normal, reciprocal communication such as expressing their emotions and thoughts were common only for two participants: the longest and shortest caregiving period respectively. Even though this was not presented as a negative experience for the current sample, the enhancement of positive reciprocal influences could potentially improve both caregiver and recipient's self-efficacy and assist in the adjustment to the role better (Li & Loke, 2014). Engagement with social support was highly influenced by expression adjustment based on the response received (Nolen-Hoeksema & Davis, 1999), which could be explained by emotional distress experienced by some participants in a more recent caregiving study when watching a family member suffering (Anderson & White, 2018).

Similarly, consistent with previous literature although some were not studied in the young adult population, character building and affirmation of value systems were mutually present for all individuals. In achieving a sense of accomplishment on the part of the caregiver and providing a caregiving transaction of quality, self-efficacy has a role to play (Carbonneau, Caron & Desrosiers, 2010). Although one participant within our study mentioned stepping into the role with low self-esteem, they fortunately still had high self-efficacy to fulfill their duties and with progression of time. Self-acceptance and validation of value systems were shared across participants and has been noted to be one of the predictors for positive psychological well-being in caregivers (Kramer, 1997; Anderson & White, 2018). Overall, intrinsic character traits such as increased level of patience, maturity and examples discussed above were growth that were present in current literature available which also studied a young adult sample, however ranging up to the ages of 40 (Pope, Baldwin & Lee, 2018).

The three elements that were present in cancer caregivers but were however unable to fit into the CFPAC framework for dementia caregivers; hope, religious coping and social support were present in this small sample through a unique narrative. Hope was manifested through acceptance as a subtheme towards quality of life and death. Two participants hoped that their family would understand that not everything can be fixed with illnesses and for another two, they hoped for the ability to regain life post-cancer. It is interesting to note these positive evaluations of life and death, as cancer is understood to be a unique stressor with high potential for deterioration of quality of life and/ or death (Putterman & Cadell, 2008). On the contrary, religious coping though only present in one participant brought the selfless trait of focusing prayer for their ill parent and not on themselves who were also in distress. It was an outlet of expression towards ending the cancer pain and allowing their ill parent to be at ease. Another participant experienced a secondary transference of religion with his ill parent, utilizing religion to accept the course of illness because their parent was religious, and this gave their

parent comfort. Themes of hope and spirituality were consistent with literatures targeting benefit finding in the cancer caregiver population although done in varied care provision population (Putterman & Cadell, 2008, Kim, Schulz & Carver, 2007). Religious and spiritual coping yielded mixed findings in our small sample study which encourages for further exploration.

Lastly, with social support, the young adult population seemed to have experienced a divided sense of connectedness with outlets around them. In the context of this study, there were friends in specific that were termed as “disappointing” and, surprisingly have also shared the hesitant in partaking or confiding in their friends through the caregiving journey. It was argued that most healthcare settings’ focus is commonly on the care recipient and therefore, one would expect young carers to seek support from their close network; friends and family (Pakenham, Chiu, Bursnall & Cannon, 2007). On the contrary, the two participants with the longest and shortest caregiving period respectively experienced a very positive experience with their social support – even to the extent of not requiring them to be physically present to benefit from said social support; supported by Kim et al. (2007) who found carers with more support from their social circle experienced higher perceived caregiving benefits. Our study saw two extremes of the role of social support and it is noteworthy for further exploration within a broad range of young adult population. It was however consistent in the light of this article that some participants could not seek as much support from their peers, suggesting an additional stressor to their caregiving journey. Some caregivers felt none of their peers would have been able to comprehend the circumstances, thus choosing not to seek support from their exterior circle. Filtering of social support was shared in this study and therefore caregiving benefits can be seen in a different light. Social support provides a positive resource for spousal caregivers and individuals in the older population (Chen & Greenberg, 2004), but the partial absence in this study could potentially be due to the limited exposure by young adults to such adverse circumstances observed around them.

Limitations and Recommendations

To our best knowledge, this study represents the first to explore young adults within the realm of caregiving towards parental cancer. However, the greatest limitation of this study was in its inability to recruit a larger sample, which yielded important results that are therefore non-conclusive but could be used for further exploration and replication with stronger sample size and interview methods. Similarly, to understand gendered experiences better, it is advisable to achieve a balanced recruitment ratio between men and women caregivers as this study did not achieve such balance. Besides all that has been discussed above, future studies could focus on the influence of death and bereavement towards the conceptualization of positive aspects of caregiving (PAC) in young adults as the current study found unique understandings between duration of bereavement towards PAC, and varied perspectives of PAC for young adults that have experienced the passing of their parent and those that are in long term cancer caregiving.

The current study contributes towards the practical development of support currently available for young adult carers towards their parent in a similar way that highlights accessible outlets for spousal carers. Inability to seek support from external social circle due to perceived shared universality of experience could suggest that proposing young adult caregiver support groups in medical or social work settings could be beneficial. While death and bereavement were shared through a unique positive lens in our study, it adds towards accepting and fulfilling the patient’s journey to the end of pain and achieving quality of death. Although the debated Liverpool Care Pathway was phased out in 2014, it is possible to still execute such end of life

care pathways respectfully by placing consent and ethical collaborative effort from all healthcare professionals. Lastly, as the current PAC review was only done with spousal caregivers checking suitability with the Dementia CFPAC; this study could be replicated in wider and larger young adult population to understand further specificity within the demographics and soon, conceptualize a PAC framework that would best fit cancer carers.

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Appendix A

Interview Schedule

Opening

Hello there. First of all, thank you for taking the time and interest to be part of this study and allowing me to interview you. This interview is being done to contribute towards the aim of understanding and exploring the positive aspects of caregiving (PAC) in individuals like yourself that have experienced being caregivers towards parental cancer. At any point throughout this interview if you feel any form of discomfort, feel free to end the session at your own pace. Do you have questions for me before I begin the interview?

A. Positive Aspects of Caregiving (PAC)

- 1) Could you tell me how you came about being a carer to your parent?
- 2) How would you describe the ways you cared for your parent?
Prompt: characteristics that made you feel good about yourself or your parent.
- 3) How did you care for your parent in the ways that you mentioned?
Prompt: from yourself or due to parental request?
- 4) What aspects of your caregiving experience that made you feel good or wanted to improve on?
Prompt: improved relationship with parent, feeling less burden.
- 5) How do you think your caregiving transaction helped your ill parent?
Prompt: parent felt more comfortable, open conversations.
- 6) Overall, how has this caregiving journey been meaningful or beneficial to you?
Prompt: by taking care of an ill parent, sense of fulfilment, better understanding of self and parent.

B. The Self and Others

- 1) What changes did you see in yourself during the caregiving journey?
Prompt: mentally, physically or emotionally.
- 2) What have you learned about yourself with this caregiving experience?
Prompt: personal development, self-esteem, caregiving skills, and mood.
- 3) What is your perception of cancer caregiving?
Prompt: Has this changed since you became a carer?
- 4) How has this caregiving experience influence your parent-child dynamics?
Prompt: if you got along well/ did not get along before the illness, how has it changed during the caregiving phase?
- 5) How has this experience influence the relationship with your social circle?
Prompt: friends, relationships, college/university or work.
- 6) How did you balance your caregiving role with your personal life?
Prompt: caregiving and university, caregiving and work, or caregiving and social life.

C. Coping

- 1) What coping mechanisms did you use when caring for your parent?
Prompt: seeking information about the illness, support from family/relatives/friends, having conversations with your parent about the both of you feel.
- 2) What were some of your coping activities?
- 3) How have other people (family members, relatives, and friends) helped in your caregiving experience?
- 4) Did spirituality or religion have a role to play in your coping? If yes, how?
- 5) What motivated you to continue your caregiving role?
Prompt: Any particular thoughts you had during the experience.
- 6) Was your motivation towards the role consistent, or did it fluctuate at times? If it did fluctuate, in what ways and why?
Prompt: to make sure you could fulfil your caregiving duties every day, without fail. (Continuity)

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