

Socio-political and economic correlates influencing abortion policies across the states in America

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Abstract

In United States abortion has been the divisive issue in social and political front. In June 2022, a long-awaited ruling of US Supreme court officially reversed 1973s ruling on Roe v. Wade that established the constitutional right to abortion. Access to abortion has been facing challenges by the right wing formal and informal socio-political agencies placing reproductive health of women at risk. Pro-life conservative groups across the states have been attempting to make abortion difficult to access through enacting laws prevailing societal norms and patriarchal values based on religiosity. Utilizing the social determinants of health and system perspectives this study measures the cumulative effect of sociopolitical and economic variables on abortion policy scores of the states using multiple linear regression model. Independent variables in the model are state's 2020 presidential election outcome, prevalence of teen abortion, unemployment among women living in poverty, and enrollment of women in higher education. As hypothesized, presidential election outcome was identified as a predictor of state's abortion policy attribute and the extent of policy being supportive or restrictive. Bivariate analyses show significant associations between dependent variables and the predictors in expected direction such as, states with supportive abortion policy had higher enrollment of female in college or graduate school compared to that of states with restrictive abortion policy. Implications and recommendations for future research are provided.

Keywords: abortion, women's empowerment and rights, reproductive health and rights, roe vs. wade, United States

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Introduction

On June 24, 2022, the US Supreme Court overturned the landmark *Roe v. Wade* ruling of 1973 and ended the federal constitutional right to abortion in the United States (Guttmacher Institute, 2022). Following this ruling, eleven states banned abortion completely or prohibited it after six weeks of pregnancy, and in total, twenty-six states are anticipated to ban abortion (Caldwell, 2022). Understanding the socioeconomic and political context of abortion policies across the United States is more important than ever now. Anti-abortion movements, propelled by the conservative social groups, have gained momentum over the years, particularly during Donald Trump's tenure in the White House. Within a year of the presidential election in 2016, more than hundreds of abortion restrictions were enacted across the United States (Feuer, 2021; Nash, 2021). With an aggressive hostile approach, anti-abortion movements have been steering the conservative political forces, utilising religious values to restrict women's access to abortion across the states (Sonfield, 2018). For example, the controversial Texas abortion law, known as "Senate Bill 8" (SB-8) banned abortion as early as at six weeks of gestation – is the first law in the country to offer cash bounty to "private citizens" for suing anyone who they suspect for "aiding or abetting" an abortion (Simon, 2021).

States with conservative approaches to abortion have been developing and implementing targeted regulations for abortion providers for decades, however, enforcing regulations through provoking ordinary citizens is a strategic shift toward more manipulative policy approach. In such context, it is essential to identify the socio-political and economic factors influencing the abortion policies of the state and understand their impact on women's reproductive health. States' abortion policy will have strong impact on social work practice and lives of women clients and their families. For millions of women particularly of low-income groups and minority, limiting access to abortion and consequent unwanted pregnancies would pose a threat to secure economic autonomy and other life opportunities such as education (Foster et al., 2022; Oberman, 2022).

The Judicial branch of the United States had to arbitrate the dispute over abortion issue largely focusing on interpretation of abortion rights in the light of US constitution. Despite the constitution's pledge to equity, justice, and fairness, a strong presence of conservative perspective

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in policies relating to women's reproductive rights is evident. Policies are developed within a pre-existing context encompassing social, political, and economic factors that needed to be understood by policy advocates to assess the feasibility of developing or changing a policy (Collins et al., 1999; Exworthy, 2008; Frenk, 1994). This study aims to identify the sociopolitical and economic factors influencing states' abortion policies in the United States.

Policy Context

Abortion policies reflect the societal perspectives to such rights of women and capture the extent of social control over these rights influenced by the norms of patriarchy, heterosexuality, motherhood, and citizenship (Calkin, 2018; Fletcher, 2007; Woliver, 2010). Throughout past decades, different courts of the judicial branch have explained whether women have the right to have abortion, or states have the authority to ban abortion. For example, the United States federal court adjudicated women's rights to terminate an unwanted pregnancy in numerous rulings such as, the "Casey vs. Planned Parenthood of Southeastern Pennsylvania" of 1992, Hodgson vs. Minnesota of 1990 and, Gonzalez vs. Planned Parenthood Federation of America of 2007 (Pew Research Center, 2013). Lower court's decisions had been superseded or upheld often in these rulings leaving grey areas in the verdicts to be interpreted and realised by the states. For example, court's ruling on "Casey vs. Planned Parenthood" of southeastern Pennsylvania of 1992, authorised the state to regulate abortion prior to fetal viability with the stipulation that such regulations would not impose any 'undue burden' preventing a woman from attaining a legal abortion to protect pregnant mother's health and the life of the fetus (Medoff, 2010). Interpreting 'undue burden' remains with state's own political devices, often with legislatures and lower courts, because this ruling did not clearly define what are to be considered as substantial obstacles that could prevent pregnant women from having abortion.

Access to abortion is a crucial aspect of women's reproductive rights and health that ensures their capability to make decisions on whether or how to 'reproduce' and utilise their 'freedom' to make such choices "free of discrimination, coercions, and violence, as expressed in human rights documents" (International Conference on Population and Development, 1994; Pillai & Gupta, 2011). Reproductive rights have been identified as an integral part of "the human rights of women and of the girl-child" as well as of the "universal human rights" (United Nations, 1993). As a

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human rights champion, the United States should be leading the progressive drive toward reproductive rights for all (Forsythe, 1988; Gross, 2002). Unfortunately, the historical context of abortion politics does not support such an assumption. Conservative states have been enacting laws banning abortion, often turning it into a punishable offence, and imposing strict regulations to make abortion difficult to access consistently (Medoff, 2007, 2010).

Socioeconomic and demographic factors can influence abortion policy and have associations with outcomes of these factors. For instance, access to abortion might reduce unplanned teen pregnancies lowering non-marital and teen birth rate that subsequently can increase women's economic opportunity (Levine et al., 1996; Medoff, 2007, 2010). This current study seeks to identify key socioeconomic and political determinants influencing the characteristics of abortion policies of a state and measure their effect on those policies.

Theoretical framework

To measure the effect of socioeconomic and political determinants on abortion policies of a state, two major theoretical perspectives capable of incorporating the associations between socioeconomic and structural correlates shaping women's reproductive health such as their economic opportunity and level of gender equity reflecting their reproductive power, strength of political agencies favoring or opposing women's access to abortion, can be utilised. These are: social determinants of health (SDOH) framework, and system perspective (Bertalanffy, 1968; Brown, 2021; Matisoff, 2008; Nair et al., 2006; Pillai, 2011; World Health Organization, 2021).

The SDOH perspective appears to be an appropriate framework which denotes overall socioeconomic and living conditions of a population encompassing societal systems and resources, organisation and distribution of such resources, and risk and protective factors of health as the determinant factors of their health and wellbeing (Exworthy, 2008; Hahn, 2021; O'Neil et al., 2020). In lieu of abortion rights, all five key domains of social determinants recognised by SDOH (i. e., socioeconomic condition, education, healthcare, neighborhood and physical environment, and social and community context) might affect reproductive health through influencing abortion access (Brown, 2021; Exworthy, 2008). Living in a state with restrictive abortion policy, for instance is the social context which restricts women's ability to access to abortion and adversely affects their reproductive health (Brown, 2021; Mishra et al., 2010; O'Neil et al., 2020). Based on Salehin: Socio-political and economic correlates influencing abortion policies across the states in America.

the assumptions of SDOH, women are likely to have a sound reproductive health if the determinants of the five domains facilitate supportive public and health policies ensuring their engagement and access to healthcare, employment, education and healthy living environment (Hahn, 2021; Islam, 2019; Marmot & Wilkinson, 1999).

System perspective can be utilised as the backdrop sustaining the social determinants of health in which women interact with the socio-political, economic, and environmental systems such as public welfare agencies, and share available resources needed for meeting essential needs such as, food and shelter, access to education, employment, transportation, and healthcare (Hahn, 2021). Women's engagement in these societal systems requires interactions with other systems following the frameworks implemented as policies built upon societal values, rules of human behavior, and ideologies (Hahn, 2021). For example, women's capability to make reproductive decisions such as termination of unwanted pregnancy, family size, and intercourse, largely depend on social and economic opportunities available for them situated in the domains of 'economic stability', and 'education access and quality' of SDOH (Islam, 2019; Nair et al, 2006; Upadhyaya & Karasek, 2012). The level of women's participation in the formal workforce indicates the extent of their access to economic activities and resources through a 'social transaction' which is mostly possible in a democratic society fostering functioning governing systems at macro level adhering the values of social justice and equality (Pillai & Gupta, 2011; Rothschild & Tomchin, 2005).

The extent women will share the available resources of the societal systems largely depends on the policies and their approaches reflecting the extent of gender equity, explicit and implicit values of political agencies existing the society (Brady, 2019; Pillai & Gupta, 2011; Ritter & Bammer, 2010). Abortion policy resulted from the pressures of numerous diverse interest groups, and strong influence of ideology adheres the approach of 'power and interest groups' policy formation (Fenna, 2004; Weiss, 1983). State legislatures at macro level might take supportive or restrictive approach to abortion which depends on the party in control of state legislature, its ideology, personal and core values of legislators, and influence of advocacy or interest groups opposing or supporting abortion (Fenna, 2004; Schwartz et al., 2010).

System perspective contributes to the current study's theoretical framework through mapping the available resources and the routes of their distributions, and constraints influencing the political

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and social determinants of reproductive health embedded across the systems at micro, mezzo and macro levels. The general system theory (GST) defines systems “as a set of elements in interrelation” (Bertalanffy, 1968, p. 55) which underscores the exchange or information among interrelated elements as the function of the systems (Fitch, 2004; Sauber, 1983). Utilisation of GST speculates that interrelated systems of individual women and policy making state agency such as, the legislature would support each other through exchanging resources to function and maintain balance. However, obstruction in the process of exchanging energy or resources due to restrictive abortion policy might cause ‘entropy’ or disorder in the systems leaving the interrelations and system at risk of existence (Fitch, 2004; Sauber, 1983). In order to continue the flow of energy, regulatory systems at the macro level (such as the state government) allocate, control, and distribute the resources generated through socioeconomic process in which individual women participate as micro system (Hahn, 2021).

Identifying the factors influencing the flow of energy would find the niche in the system requiring policy intervention to formulate supportive abortion policies or to modify the existing ones. The theoretical model of this study takes a system perspective and selects four structural and environmental correlates representing health and gender equity for women based on the social determinant of health model to examine the relationship between these correlates and abortion policy attributes, which are: prevalence of teen (15-19 yr.) abortion, unemployment situation among women living in poverty, level of women education within the state, and electoral outcome of a state in the presidential election of 2020.

Presidential Election Result

Historically in American politics, candidate’s views toward abortion have been instrumental in mobilising voters not only in presidential election, but also in state legislative, gubernatorial, and local elections as well (Gross, 1995; Jelen & Wilcox, 2003; Miller & Krosnick, 2004; North, 2019). In general, the American political discourse translates the political ideology of voters through differentiating their affiliation to liberalism, represented by Democrat partisans vs. conservatism represented by the Republicans (Lyons & Scheb, 1991). Conventionally the political media labels the states as “blue” where voters predominantly support the Democratic candidate, by contrast the label of “red” refers the states where majority of the voters vote for Republican candidate in the

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presidential and senate races (Abramowitz & Saunders, 2005; Shin & Webber, 2014). Although states are consistent concerning party affiliation, there are battleground states where either the Democratic or Republican candidate may win due to cast of swing voters who are not loyal to any particular party rather make their voting decision based on candidate's personality and views on socioeconomic and contemporary issues such as abortion (Blankenship et al., 2018; Wurgler & Brooks, 2014).

Labeling the state as 'blue' or 'red' can be explained by Elazar's (1972) theory of political culture which identifies moralistic, individualistic and traditionalistic political culture based on the state's "fundamental political beliefs and values" deriving from residents' view to purpose and role of government (Elazar, 1972). Out of three types of political culture, traditionalistic political culture espouses paternalistic and elitist values to maintain existing hierarchical social and political order and appears to be in accord with the perspective of conservative 'pro-life' advocates who oppose abortion and same sex marriage, and promote abstinence and restriction to access contraceptives (Elazar, 1972; Russo & Denious, 2005).

It has been observed that Republican campaigns, by and large, champion these agendas while running for the offices in local and national elections, enjoying electoral advantage in the states with traditionalistic political culture that adheres to patriarchal values endorsing the belief that society has the right, and therefore should uphold a 'norm' regarding sexuality and reproduction (Aiken & Scott, 2016; Cohen, 2011, 2002; Shin & Webber, 2014). In 2016, presidential election Republican candidate Donald Trump and his running mate Mike Pence (well-known for their career-long endorsement against abortion) pledged to continue supporting anti-abortion movement, committed to nominating anti-abortion judges to the US Supreme Court (Joffe, 2017). After being elected Mr. Trump remained faithful to his words and appointed justices not only in the highest court of the nation, but also in state and local level courts. Consequently, votes of Trump appointed conservative justices in the Supreme Court attributed to the majority needed to overturn the landmark *Roe v. Wade* ruling that established constitutional right to abortion in the United States (Colvin, 2022). Hence, the outcome of the presidential election matters for women's abortion rights which also depicts citizen's approval or disapproval of the candidate's endorsement for women's overall reproductive rights. Current study uses endorsement of each state's electoral

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college in the 2020 presidential election to appraise socio-political approach to abortion right of the respective state.

Reproductive rights and socioeconomic resource

This study uses two variables to measure the association between women's abortion rights and economic opportunity: (i) unemployment rate of women living below poverty line, and (ii) women's enrollment in higher education within the state. Women's participation in formal labor force indicates the extent of their access to economic resources, political power, social status, and gender equality (Inglehart & Norris, 2003; Pillai, & Gupta, 2011). In states with a stable and growing economy, women are expected to have higher earning opportunity and resources, and consequently stable control over their reproductive decision including abortion (Pillai, 2017). Women living in poverty are likely to experience adverse health outcomes resulted from limited access to socioeconomic resources essential for health such as nutritious food, housing in a safe neighborhood, or access to abortion due to change in economic and political system (Brady, 2019; Calnitsky, 2018; Rank, 2011). The process of constant exchange of resources between micro and macro level systems can be theorised here in which women receive or share resources with the economic systems of the state they are living in. Women at micro level are likely to make better reproductive choice if they have support of the economic systems at macro level.

The social determinant of education, represented to be the variable of women's enrollment in higher education of a state is a social indicator of the extent of women's access to resources and empowerment mainly through employment which essentially enhance their reproductive health and overall health (Brown, 2021; Finlay & Lee, 2018; Pillai & Gupta, 2011). Educated women are likely to have more control over reproductive decisions such as, delaying the birth of their first child, or terminating an unplanned or unwanted pregnancy (Ankara, 2016; Urbaeva et al., 2019). With higher education, women are likely to have strong voice and participation in social and political agencies through diverse roles (such as representatives or senior bureaucrats) leading to social and political climate supportive to women's reproductive right.

Prevalence of teen abortion

Public preferences influence the overall political environment of a state and consequently shape

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the policies (Hill & Leighley. 1992; Kingdon, 1989). Based on Kingdon's (2002) assumptions, the prevalence of teen abortion can be used to speculate the influence of prolonged teen pregnancy issues on overall policy approach across the states. Even with a declining trend, the United States had the highest teen birth rate of 16.7 per 1,000 females (15–19 year olds) among the western industrialised nations in 2019 (Martin et al., 2021; Sedgh et al., 2015). Federal policymakers responded to this issue back in early 2000, by implementing policies that encouraged states to impose an “abstinence-only sex education” program supported by the Title-V, section 510 grants. This policy initiative was adopted by like-minded states mostly with republican majority in the legislatures and received funding to teach school-age children abstinence from sexual activity outside of marriage and support of ‘pro-life’ conservative advocacy groups (Russo & Denious, 2005). States with dominant pro-life support groups and higher religiosity are likely to advocate for restrictive policies to lower the abortion rate (Cavazos-Rehg et al., 2012; Russo & Denious, 2005).

Using the variables discussed above, the following hypotheses were tested: (1) socioeconomic and political characteristics of states are associated with state's abortion policy, such that states with supportive abortion policy will have higher prevalence of teen abortion, higher rate of female enrollment in college or graduate school, and lower prevalence of unemployed women living in poverty compared to that of the states with restrictive abortion policy. (2) “Blue” states, i.e., states who endorsed Democratic candidate in 2020 presidential election, will have supportive abortion policy compared to that of red states that endorsed Republican candidate (3) Abortion policy of a state is affected by the independent variables, i.e., presidential election outcome, prevalence of teen abortion, level of female enrollment in college, and prevalence of unemployed women living in poverty.

Methods

All fifty states of the United States were included in this study ($N = 50$). Due to its special status of a federal district under the jurisdiction of the US Congress, the District of Columbia (DC) was excluded.

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Dependent variable

The dependent variable of this study is the state's abortion policy score given to all fifty states by Guttmacher Institute (2021), an established pro-choice research institute engaged in analysing policies on women's reproductive rights including abortion. The dependent variable reflects the assessment of overall abortion policy approach being 'hostile' or 'supportive' to women's abortion rights and access (Nash, 2019). For each criterion listed as follows, a state received a score of -1 if abortion restrictions were in effect through state law(s) (i) banning pre or post viability abortions, (ii) requiring in-person abortion counseling followed by a waiting period before the procedure, (iii) restricting Medicaid coverage for abortion cost, (iv) prohibiting use of telemedicine to provide medication required for the procedure (v) requiring parental involvement for women younger than 18 years of age to have an abortion, and (vi) imposing unnecessary and onerous abortion clinic regulations for abortion providers. For each criteria listed as follows, a state was given a score of +1 if state policies enacted protective measures to ensure women's access to abortion by (i) affirming the right to abortion in state's constitution (ii) establishing a legal standard (iii) allowing state's Medicaid funds to cover abortion cost (iv) allowing advanced practice clinicians to provide abortion (iv) mandating private health insurance plans to cover abortion, and (vi) protecting women's access to abortion clinics (Nash, 2019). Hence, a state may receive a maximum score of +6, meaning that the state has all the protective measures in effect, or a minimum score of -6 meaning that the state has all the abortion restrictions in effect by law. Scoring implies that the higher the score, the more supportive are the state policies to abortion rights.

The dependent variable of "abortion policy score" was operationalised using categorical level of measurement such that, states with higher score fall into the groups of supportive policy approach and states with lower score fall into the groups of restrictive policy approach, following the criteria of classification as follows: abortion policy score between -6 and -5 classified the state as with "hostile" policy approach and received a value of 1, with a policy score between -4 and -3 the state was grouped into policy with "restrictive" approach and received a value of 2, a state with policy score between -2 and 2 was identified with "neutral" approach and received a value of 3, state with policy score of 3 or 4 was identified with "supportive" approach and received a value of 4, and state with a policy score between 5 and 6, the state was places into the group of "very supportive" policy approach and received the maximum value of 5.

Independent variables

As explained in the theoretical framework, the independent variables of this current study are: (1) Salehin: Socio-political and economic correlates influencing abortion policies across the states in America.

Presidential Election results of 2020 (2) The state's unemployment rate of women living in poverty (3) Teen (15-19 years) abortion rate of the state (4) Women's enrollment in higher education (college or graduate school) within the education.

Presidential Election outcome. We obtained the state's endorsement in 2020 US presidential election from the official election result declared by the Federal Election Commission (FEC) of the USA (Federal Election Commission, 2021) and assigned a value of 1 to the states in which Republican candidate won the electoral college and a value of 2 to the states in which Democrat candidate won.

State's unemployment rate of women living in poverty. State's unemployed women's poverty level reflects the extent of women's economic opportunity as well as the challenges women face while taking reproductive decision. The information on state's unemployed women's poverty was collected from the United States Census Bureau (2019).

Teen abortion rate. We used the data of teen abortion rate obtained from the Guttmacher Institute Data Center (Maddow-Zimet, & Kost, 2021). Abortion rates refer to the number of abortions per 1,000 women of aged 15 to 19 years in 2017, by state of residence.

Female enrollment in higher education. State's level of women education was measure using the proportion of women of 18-24 years enrolled in graduate school or college in 2019. The information on state's level of women's education was collected from the United States Census Bureau (2019).

Analyses

Data was analysed in three steps, beginning with descriptive analyses of the variables. We conducted one way analysis of variance and multiple linear regression analysis in the following steps to test the hypotheses. Before the analysis of data, the assumption of normality was checked by examining the kurtosis and skewness values for all variables. No outlier was found for any variable within the cases. Both descriptors of the distribution of all variables were found to be within acceptable ranges, for skewness in between +2 and – 2, and for kurtosis between -3 to +3 (Byrne, 2010; George & Mallery, 2010). Hence data was considered as normally distributed.

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Descriptive Analysis

With respect to policy being supportive, neutral, restrictive, or hostile, 32% of the states were identified with “hostile” policy, 18% with “restrictive”, 24% with “neutral” policy. Only one state was identified with “very supportive” policy with a score of 5, and 12 states (24%) were found with “supportive” abortion policy. In the 2020 presidential election, half of the states ($N = 25$) were identified as “blue” states who endorsed the Democrat candidate and other half were identified as “red” states who endorsed the Republican candidate.

As expected, unemployment rate of women living in poverty was found higher in states with hostile policy ($M = 36.15\%$, $SD = 6.68$) compared to the states with supportive ($M = 28.5\%$, $SD = 5.59$), and very supportive ($M = 26.6\%$) abortion policy. Female enrollment in college or graduate school was found higher in states with supportive ($M = 31.12\%$, $SD = 3.63$) abortion policy compared to that of states with restrictive ($M = 28.58\%$, $SD = 2.13$) and hostile ($M = 27.66\%$, $SD = 1.38$) abortion policy. As predicted, teen abortion rate was found lower in the states with hostile ($M = 4.69$, $SD = 1.02$) and restrictive ($M = 5.18$, $SD = 1.84$) abortion policy compared to that of states with supportive ($M = 8.60$, $SD = 3.47$) and neutral ($M = 6.97$, $SD = 2.55$) abortion policy.

In terms of 2020 presidential election outcome, 94% of the states with “hostile” abortion policy casted their electoral votes for Republican candidate. As expected, out of 12 states with “supportive” abortion policy 11 states (91.7%) endorsed Democrat candidate in 2020 presidential election.

Test of Hypotheses

Hypotheses were tested using one-way analysis of variance (ANOVA) test that predicted the correlation between social, economic and political indicators with the abortion policy score of respective state. The following section discusses the result of data analysis presented in table 1 below:

Table 1: *One-Way Analysis of Variance (ANOVA) results using abortion policy score as the criterion*

Variables	$F(4, 45)$	η^2
Unemployment rate of women living in poverty	4.553*	0.288
Enrollment of women in college or graduate school	3.683*	0.247
Presidential Election 2020 result	9.605*	0.461
Teen (15-19 yr.) abortion rate	6.025*	0.349

* $p < .05$.

We hypothesised that states with supportive abortion policy will have higher prevalence of teen abortion rate than the states with restrictive and hostile abortion policy. The result of the data analysis supports this hypothesis. States with “very supportive” abortion policy ($N = 1$, $M = 9.60$) was found with the highest ‘teen abortion rate’ followed by the states ($N = 12$) with “supportive” abortion policy, ($M = 8.60$, $SD = 3.47$). States ($N = 16$) with “hostile” abortion policy ($M = 4.69$, $SD = 1.02$) had the lowest abortion rate ($M = 4.69$, $SD = 1.02$) whereas states ($N = 9$) with “restrictive” abortion policy ($M = 5.18$, $SD = 1.84$) had higher teen abortion rate than states with “hostile” policy but lower than “neutral” policy ($M = 6.97$, $SD = 2.55$). The difference between the states’ teen (15-19 years) abortion rate in terms of abortion policy category was significant [$F(4, 45) = 6.025$, $p = .001$].

Our hypothesis predicted that states with supportive abortion policy will have lower rate of unemployment among women living in poverty. Result of the data analysis shows the trend and supports the hypothesis. Percentage of women unemployment living in poverty was found higher in the states with hostile ($M = 36.15$, $SD = 1.67$) and restrictive ($M = 32.60$, $SD = 3.73$) abortion policy compared to that of states with “very supportive” ($N = 1$, $M = 26.60$), “supportive” ($M = 28.53$, $SD = 5.59$), and “neutral” ($M = 27.64$, $SD = 6.82$) abortion policy. The difference in the

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mean of states' 'unemployment rate or women living in poverty' was also statistically significant [$F(4, 45) = 4.553, p = .004$].

We also hypothesised that states with supportive abortion policy will have higher enrollment of female in college or graduate school compared to that of restrictive or hostile states. Result of the data analysis supports the hypothesis and the predicted direction. States with "very supportive" abortion policy had the highest ($N = 1, M = 32.80$) rate of women's enrollment in college or graduate school followed by the states with "supportive" ($M = 31.12\%, SD = 3.63$), and "neutral" ($M = 30.23\%, SD = 3.36$) abortion policy. States with "hostile" policy had the lowest ($M = 27.66\%, SD = 1.38$) rate of women enrollment in college or graduate school. The difference between the mean of states' 'women's enrollment rate in college or graduate school' was also statistically significant [$F(4, 45) = 3.683, p = .011$]. Table 1 also presents the partial eta square (η^2) indicating large effect of each predictor variables. This estimate highlights presidential election outcome as the predictor with highest proportion (46%) of the variance in the state's policy score that can be explained by the variance in the groups of the independent variable.

We predicted that "blue states" will have higher abortion policy score compared to the "red" states, implying that, blue states are likely to have supportive abortion policy and red states are likely to have restrictive abortion policy. Result of the data analysis supports this association. Blue states had higher policy score ($M = .96, SD = 3.20$) compared to that of red state ($M = -.144, SD = 3.77$). As predicted, among the states with "supportive" abortion policy about 92% were "blue states", and 93.8% of the states with "hostile" ($N = 16$) abortion policy, were identified as "red states". The difference between the mean of abortion policy score between "red" and "blue" states was found significant [$F(4, 45) = 9.605, p = .000$].

Finally, we tested our hypothesis to measure whether independent variables i.e., 2020 presidential election outcome, prevalence of teen abortion, women enrollment in college or graduate school, and unemployment rate of women living in poverty have significant effect on the state's abortion policy score. The result of the regression analysis supports this hypothesis. Except the independent variable of "women's enrollment in college or graduate school" – other three predictors reveal significant impact on the dependent variable as presented in the table 2 below:

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Table2: Regression analysis results

Variables	Standardised regression coefficient	<i>p</i>
Teen (15-19 yr.) abortion rate	.248	.044*
Unemployment rate of women living in poverty	-.224	.043*
Enrollment of women in college or graduate school	.159	.175
Presidential Election 2020 result	.358	.010*

* Significant at .05 level

The independent variable of unemployment rate of women living in poverty had a negative standardised regression coefficient indicating that the states with higher policy score has low level of unemployment among poor women. Overall, the model had an adjusted r-square of .536 and revealed significant impact of the predictors on the states' abortion policy score [$F(4, 45) = 15.125$, $p = .000$].

Discussion

The objective of this study was to assess whether socio-political and economic indicators could predict the attribute of state's abortion policy being supportive or restrictive using a theoretical framework based on SDOH and system perspectives. The associations between the constituents of women's reproductive health evident through data analysis suggest that a supportive policy context is required for having abortion policy with supportive approach. Findings of the current study supports our hypotheses and endorse significant impact of political context, along with social and economic factors on abortion policy of the state which maximises the reproductive choices for women.

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Except the women's enrollment in higher education, other three independent variables i.e., teen (15-19 yr.) abortion rate, unemployment rate of women living in poverty, and state's endorsement in the Presidential election of 2020 – were found to be significant predictors of abortion policy score. Even though independent variable representing women's education was not significantly associated with the abortion policy score, ANOVA analysis supported our hypothesis that predicted states with supportive abortion policy likely to have higher enrollment of women in college or graduate school compared to that of states with hostile policy. An embedded correlation between independent variables representing women's education and economic condition might have caused the individual effect of 'women's enrollment in higher education' variable not being significantly associated with the dependent variable of the regression model. This should be noted here that such correlation between independent variables does not reduce the predictive power or reliability of the regression model as a whole (Adeboye et al., 2014).

As hypothesised, "blue" states were found with supportive abortion policies contrasting "red" states with restrictive and/or hostile abortion policies implying the independent variable of presidential election outcome as a significant predictor of the abortion policy approach, and the extent of being supportive or restrictive. Results of the bivariate analyses show significant associations between dependent variables and the predictors in expected direction. Social and economic correlates shaped by the state political climate were found to significantly influence the attributes of abortion policy.

As we theorised, considering system and SDOH perspective, the associations between sociopolitical determinants and the dependent variable of state's abortion policy score highlights the process of sharing energy or resources such as, opportunity to have education, employment, and healthcare between societal systems (Fitch, 2004; Hahn, 2021; Islam, 2019). This study, even though considered only few such variables, the significance of sociopolitical and economic factors on policy approach can be speculated. It is noteworthy to mention that the theoretical framework of the current study does not underscore any causation based on the correlations between the variables found through data analysis. Findings of this study only suggest partial aspects of social, political, and economic systems of a state predicting the characteristics of the abortion policies in effect.

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Limitations of the study

There are some limitations in the study design that should be noted. The small size of population ($n = 50$) is a strong factor that might reduce the ability of statistical analyses to reach statistical significance. The statistical significance was measured at conventional .05 level to address this limitation. The ratio of ‘cases to independent variables’ was about 12.5:1 which is lower than the conventional ratio but adequate to prevent fatal flaws in regression analysis and might have attributed to the low p-values. Data of teen abortion rates for the states of California, Maryland, New Hampshire, and Wyoming were missing. We collected the data from the study conducted by Guttmacher Institute (Maddow-Zimet & Kost, 2021) which estimated the missing data of California by based on the number of abortions among all women in the state and the proportion of abortions obtained by women of the same age nationally. For the states of Maryland, New Hampshire and Wyoming the teen abortion was estimated based on the number of abortions among all women in the state and the proportion of abortions obtained by women of the same age in neighboring or similar states (Maddow-Zimet & Kost 2021). We used the data of the original source without any modification.

Implication and conclusion

One of the important implications of this study is to underscore the influence of political climate or context on abortion policy approach – represented by the variable of state’s electoral college endorsement in presidential election which could differentiate the states in terms of policy being supportive or restrictive. This is consistent with findings of prior studies illustrating the importance and influence of ideology and partisanship on policy approach (Gershtenson et al., 2006; Sakei, 2019). Like other social and legal policies, abortion policies of states reflect choice and perspective of the constituency’s voters who have been observed to be more “ideological” and shifting toward either “conservative or liberal extremes” (Brewer, 2013; Sakei, 2019). Amid increased polarisation and division among voters, findings of current study imply the urgency of having more support of liberal voters particularly in the red states to have supportive abortion policies.

Only half of the fifty states were found to have supportive abortion policies mostly among the “blue” states which explains a predicament that needs immediate attention. Advocacy strategy should focus on establishing abortion as an integral aspect of reproductive health and reproductive

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rights, rather than a moral or ethical issue. In a democratic political system importance of continuing advocacy for reproductive rights particularly during the electoral campaigns in the “red” states cannot be overstated.

Social workers practicing in these states are likely to face the challenges posed by the restrictive abortion policy. Women living in the states with restrictive laws are likely to face difficulty accessing abortion due to various reasons including lack of abortion coverage by their health insurance. Agencies or programs serving such areas may need to facilitate transportation or financial assistance for their clients who might need to travel out of state to get an abortion. Even though crossing the state border for having abortion has not been banned by any state law yet, providing such assistance might be considered as violation as exemplified in Texas SB-8.

Due to new restrictions abortion will be more costly, and for many might be unaffordable, causing unwanted pregnancies who would need resources and support. Practitioners and agencies should be well informed about the possible difficulties and challenges clients may face and be prepared with strategies to provide clients with resources they might need.

Based on the findings from the current study, future research should focus on identifying other socioeconomic and political factors influencing abortion policies of a state. Further study is needed to measure the impact of policies on abortion related outcomes and other reproductive health indicators. Qualitative studies should focus on understanding the living experiences of impact of policies on clients and their families. Finally, a longitudinal study could be conducted to understand the trend in change of nature of abortion policies across the states along with the change in states populations’ demographic, and other socioeconomic and political variables. Research is also needed to understand the impact of abortion policies on women and families of different culture.

The researchers of this study concede the depth of the economic, sociopolitical and legal factors influencing the complex issue of abortion policy. Because of the federal structure of the United States’ political system in which power is shared between the central and local governments, policy context is nothing but complex and potential challenges in the course of developing and implementing a policy is difficult to assess. This study is an attempt to enrich knowledge and

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insight. Social workers need to propose and bring change in abortion policies through advocacy with a view to advance reproductive and social justice.

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