

**Request for Application**

# Governor’s 2022-23 It’s On Us PA Grant Program

The Pennsylvania Department of Education (PDE) Office of Postsecondary and Higher Education (OPHE) is pleased to issue this request for applications for eligible postsecondary institutions to fund programs to address sexual violence, dating violence, domestic violence and stalking education, prevention, and response in postsecondary education. This document describes the requirements applicants will be expected to meet and the criteria that will be used to award funding.

The application submission window will open at 12:00 AM on **Friday, October 7, 2022**, and close at 11:59 PM on **Monday, November 14, 2022**.

To apply, complete and return the attached application by email no later than 11:59 PM on Monday, November 14, 2022. Please return your application submission via eGrants.

# Background

Research suggests that sexual violence impacts a significant number of students in K-12 and higher education. By the age of 17, an estimated 26.6% of females (or 1 in 4) and 5.1% of males (or 1 in 20) have experienced sexual abuse or assault. Their adolescent peers, rather than adults, are the perpetrators in more than half of those offenses.[[1]](#footnote-1)

In college, about 1 in 5 women experience sexual assault, and women who identify as lesbian, queer, or gay are more likely than heterosexual women to experience sexual assault at college, according to the U.S. Department of Health and Human Services.[[2]](#footnote-2) A 2019 report based on campus climate surveys from the Association of American Universities found that 26.4% of undergraduate women, 6.9% of undergraduate men, and 23.1% of undergraduate transgender, genderqueer, and nonbinary students experienced sexual assault in college. 41.8% of students reported experiencing sexually harassing behavior; this figure was 65.1% for transgender, genderqueer, and nonbinary students.[[3]](#footnote-3) LGBTQ+ students are more likely than their peers to experience sexual harassment and violence and are also less likely to report it to authorities.[[4]](#footnote-4)

Across student groups, sexual violence is most likely to occur at certain times of year (in the fall) and early in an undergraduate student’s career (at the beginning of their first and second semesters in college).[[5]](#footnote-5) In the overwhelming majority of cases—90%—campus sexual violence is committed by someone the victim knows and trusts, such as a friend, classmate, roommate, partner, or other acquaintance. While many survivors share their experiences with a trusted friend or peer, fewer than 10% of survivors of sexual assault in college report it to officials such as law enforcement, campus police or public safety, school officials or faculty, or a crisis center or health care center.[[6]](#footnote-6)

Additionally, a 2017 report produced by the Pennsylvania Coalition Against Domestic Violence (PCADV) showed that women between the ages of 20-24 were more at risk of becoming victims of dating violence. When surveyed by PCADV, 57% of students reported abusive relations while attending college and 70% of the students were not aware they were in an abusive relationship. The survey also showed that 43% of female students who were dating while in college experienced violent and abusive dating behaviors such as physical, sexual, technological, verbal, or controlling abuse.[[7]](#footnote-7)

Furthermore, a 2015 study conducted by the Centers for Disease Control and Prevention revealed 54.1% of female stalking victims reported that victimization first occurred before the age of 25, with 32.9% reporting victimization occurred between the ages of 18-24.[[8]](#footnote-8)

The It’s On Us PA campaign began from a core belief that sexual violence shouldn’t be part of any student’s education. Launched by Governor Wolf in 2016 with the support of education leaders across the commonwealth, including school superintendents and college presidents, It’s On Us PA is a statewide campaign that invites education leaders and all Pennsylvanians to be part of the solution to protect students from sexual violence. The campaign has four major goals:

* 1. **Provide an education program for students in consultation with a local rape crisis center and domestic violence program** regarding sexual violence, dating violence, domestic violence and stalking and provide resources and services available for victims.
  2. **Improve awareness, prevention, reporting, and response systems** regarding sexual violence, dating violence, domestic violence and stalking prevention in schools, colleges, and universities to better serve all students.
  3. **Remove or reduce barriers** that prevent survivors of sexual violence, dating violence, domestic violence and stalking from reporting and/or accessing vital resources by creating a more consistent, empowering reporting process for student survivors of gender-based violence.
  4. **Demonstrate significant, proactive, and sustainable leadership** to change institutional culture by challenging Pennsylvania’s education leaders – including college and university presidents – as well as students, faculty, staff, families, and communities to pledge to improve their institutions’ climate.

As part of the It’s On Us PA campaign, Governor Tom Wolf successfully advocated for continued and increased funding in the 2022-23 state budget to support institutions’ efforts to meet these goals. The purpose of the Governor’s It’s On Us PA Grant Program is to fund initiatives that address campus sexual assault and education on the prevention of dating violence, domestic violence, and stalking in ways that align to the goals of the It’s On Us PA campaign, including initiatives that:

* **Increase mechanisms and capacity for reporting**. Develop, improve, or increase mechanisms for anonymous reporting and/or improve institutional capacity to collect data to meet federal and state reporting requirements.
* **Improve institutional awareness and training**. Develop, improve, or implement awareness and prevention education curricula or campus-wide training for students, faculty, and staff, including, but not limited to, institutional awareness campaigns to improve understanding of the reporting process.
* **Improve institutional response to sexual violence, dating violence, domestic violence and stalking**. Develop or improve structures to make students aware of the rights of survivors of sexual assault, dating violence, domestic violence and stalking to enhance awareness and utilization of the available on- and off-campus resources for survivors, or to strengthen institutional response protocols and resources for supporting students who have experienced sexual violence.
* **Implement a memorandum of understanding with a local rape crisis center and domestic violence program.** Develop partnerships to assist in developing institutional policy, programming, and training regarding sexual misconduct, dating violence, domestic violence, and stalking for both students and staff. This partnership should also include the opportunity for students and staff to have an off-campus alternative for receiving confidential services to address sexual harassment and violence, dating violence, domestic violence, and stalking.

# Eligibility

For the purposes of this grant, “institution” shall include postsecondary institutions in the Commonwealth of Pennsylvania with authorization to award an associate degree or higher academic degree, as defined in section 2001-J of the Public School Code of 1949, as amended (24 P.S. §20-2001-J) and private licensed schools, as defined in the Act of December 15, 1986 (P.L. 1585, NO. 174).

*Note: Private Licensed Schools do not need to offer associate degrees to be eligible to apply for this grant.*

Only one proposal will be accepted from each postsecondary institution. Applicants may not apply as a consortium. Only one proposal will be accepted from each institution. Applicants may not apply as a consortium. Only the main campus may apply, and funds can be disseminated to branches as the institution deems appropriate, if awarded.

To be eligible to apply for a Governor’s 2022-23 It’s On Us PA Grant:

1. A leader representing the institution must have taken the [It’s On Us PA Pledge](https://www.governor.pa.gov/its-on-us/#TakethePledge), indicating support for the initiative’s goals and a commitment to creating a safer, more supportive campus community;
2. The institution must be compliant with requirements in section 2001-G of the Public School Code of 1949 as amended by [Act 55 of 2022](https://www.legis.state.pa.us/cfdocs/legis/li/uconsCheck.cfm?yr=2022&sessInd=0&act=55), “Sexual Violence, Dating Violence, Domestic Violence and Stalking Education, Prevention and Response at Institutions of Higher Education and Private Licensed Schools;”
3. The institution must have adopted a sexual harassment and sexual violence policy, and established an anonymous reporting system, in accordance with Article XX-J of the Pennsylvania Public School Code of 1949 ([Act 16 of 2019](https://www.education.pa.gov/Postsecondary-Adult/Pages/Act-16-of-2019.aspx));
4. The institution must have a definition of consent as part of the institution’s code

of conduct or sexual misconduct or harassment policy in compliance with Article XX-G of the Public School Code of 1949 as amended by [Act 55 of 2022](https://www.legis.state.pa.us/cfdocs/legis/li/uconsCheck.cfm?yr=2022&sessInd=0&act=55); and

1. The institution must have a notification of rights, accommodations and protective measure in writing and on the institution’s publicly accessible Internet website in accordance with Article XX-G of the Public School Code of 1949 as amended by [Act 55 of 2022](https://www.legis.state.pa.us/cfdocs/legis/li/uconsCheck.cfm?yr=2022&sessInd=0&act=55).

# Funding

The Governor’s It’s On Us PA Grant Program offers institutions the opportunity to apply for competitive funding in an amount up to:

* $40,000 for institutions with 10,000 learners or less;
* and up to $60,000 for institutions with 10,0001 learners or more.

Funds may be expended only on eligible programs, activities, and purposes identified in the proposal and approved by PDE’s Office of Postsecondary and Higher Education.

$125,000 of the grant funds will be allocated for requests by private licensed schools who do not offer AST/ASB programs to offset the costs of implementing educational programs as mandated by Article XX-G of the Public School Code of 1949 as amended by [Act 55 of 2022](https://www.legis.state.pa.us/cfdocs/legis/li/uconsCheck.cfm?yr=2022&sessInd=0&act=55). The maximum request amount is $10,000.

Funding requests can include a combination of any of the eligible programs described in this request for application. Funding is not guaranteed to any applicant.

# Funding Priorities

Priority consideration for a Governor’s 2022-23 It’s On Us PA Grant will be given to proposals that include:

* Partnering or collaborating with K-12 schools, or programs that benefit or target K-12 students. For example, a postsecondary institution might collaborate with a local high school on sexual violence prevention programming.
* Developing or promoting affirmative-consent standards as part of their institution’s code of conduct.
* Programs focusing on the intersectionality of learners with disabilities and sexual assault.
* Programs/initiatives focusing on populations of learners who are more at risk for assault such as those in the LGBTQ+ community.
* Demonstrating how the program builds upon and enhances initiatives implemented by the institution in previous years.

# Eligible Programs

Eligible proposals must focus on addressing the goals of the Governor’s It’s On Us PA Campaign, listed in the Background section of this document.

The following programs or activities for institutions requesting funds up to the maximum of $40,000 - $60,000 (based on student population) will be considered for funding:

*Prevention:*

1. Programming that enhances the creation and adoption of curricula, comprehensive prevention strategies, and/or campus-wide training for students, faculty, and staff, including evidence-based awareness or prevention programs that promote healthy relationship skills or programs that reduce social norms and attitudes that contribute or lead to sexual violence, dating violence, domestic violence, or stalking.
2. Development or promotion of institutional policies, such as codes of conduct, that establish affirmative-consent standards.
3. Initiatives that partner with K-12 and/or advocacy organizations to create, adopt, or enhance curricula or provide programming to increase awareness of and improve responses to sexual assault, dating violence, domestic violence and stalking in both the K-12 and postsecondary settings.
4. Programming and initiatives which address populations of learners who are more at risk for assault such as those in the LGBTQ+ community.

*Reporting:*

1. Programs designed to develop, improve, or increase mechanisms for anonymous reporting of sexual violence.
2. Efforts to improve institutional capacity to collect data to meet federal and state reporting requirements.
3. Institutional campaigns to raise awareness and understanding of the reporting process, rights of survivors, and provide confidential resources and services available for victims of sexual violence, dating violence, domestic violence, and stalking.

*Response:*

1. Programs to develop or improve structures to make students aware of the rights of survivors of sexual assault, dating violence, domestic violence, or stalking, to enhance awareness and utilization of the available on- and off-campus resources for survivors of sexual assault, or to strengthen institutional response protocols and resources for supporting students who have experienced sexual violence.
2. Initiatives not described above that are aligned to the grant program purpose and the goals of the Governor’s It’s On Us PA campaign, which take into account circumstances brought about by the COVID-19 pandemic.

Eligible uses of funds requested by Private Licensed Schools who do not offer AST/ASB programs include initiatives to start awareness programming with learners, faculty, and staff to include the designing/implementation of an educational program, inviting speakers/trainers to facilitate discussion, website development for It’s On Us PA program awareness, and Memorandum of Understanding (MOU) development and partnership building with local agencies and community organizations.

# Eligible Expenses

Due to the limited amount of funding, only items directly related to eligible programs and activities covered in this request for application will be funded by the It’s On Us PA Grant Program. Grant funds paid to the institution may not be used for direct salaries, fringe benefits, or operational rates. All budgets will be reviewed to evaluate appropriateness and connection to proposed grant activities and goals.

**Note:** *Once approved, the institution will invoice for payment of the grant.* ***Funding must be spent by the end of the grant period and institutions may ask for a no-cost extension 60 days prior to the end of the grant period.*** *Requests made beyond that date will not be granted.*

**eGrants Access**

Grant applications will be submitted through the eGrants system.

For access to the eGrants system and the related grant opportunities, prospective applicants should complete the [eGrants Request Form.](https://forms.office.com/g/mCZRgCvGGA) Please note that the person completing the grant application must have signatory authority to negotiate grants and contracts for the institution and be able to upload documentation into the eGrants system. Institutions with eSign ability in eGrants will be able to utilize this feature to complete the application.

***Note: As of September 14, 2022, eGrants transitioned to MyPDESuite. Directions to navigate this change are located on the eGrants sign-in page.***

**Grant Application Components**

The It’s On Us PA grant application consists of twelve sections: Attachments and Materials, Applicant Information, Project Overview, Grant Objectives, Proposal Narrative, Budget Information (broken down into five sections, compliance obligations, and budget narrative), Expected Outcome, and Additional Funding Priorities.

**Section 1. Attachments and Materials**

1. The institution must provide links to or upload a copy of the institution’s current sexual violence policy.

*Purpose: To demonstrate compliance with Articles XX-G and Article XX-J of the Pennsylvania School Code of 1949 which is used to determine grant eligibility.*

1. Institutions that award associate degrees and higher must provide links to or upload a copy of the institution’s anonymous reporting system.

*Purpose: To demonstrate compliance with Article XX-J of the Pennsylvania Public School Code of 1949 which is used to determine grant eligibility.*

1. Institutions that award associate degrees and higher must provide links to or upload a copy of documented reporting.

*Purpose: To demonstrate compliance with reporting requirements in sections 2001-G of the Public School Code of 1949 “Sexual Violence Education at Institutions of Higher Education” which is used to determine grant eligibility.*

1. Institutions may upload signed letters of commitment and/or memorandum of understanding for each participating partner.

**Section 2. Applicant Information**

The applicant information section provides detailed information regarding contact information for the individual responsible for the grant application.

Applicants will also be asked to report the following information in this section:

* number of enrolled students
* number of students living on campus
* the number of student sexual assaults reported to campus or local law enforcement for each of the past three years (2019, 2020, 2021)
* indicating if the institution has ever **applied for the grant** in prior years, and to list the years if so.
* Indicating if the institution has ever **received the grant** in prior years, and to list the years and amounts if so.
* Indicating the leader who has taken the [It’s On Us PA Pledge](https://www.governor.pa.gov/its-on-us/#TakethePledge) on behalf of the postsecondary institution (e.g. a president, provost, dean, Title IX coordinator, grant coordinator, faculty leader, or representative of institutional leadership).

**Section 3. Project Overview**

In this section, the institution will provide the title of the project, estimated start Date (no sooner than January 1, 2023), estimated completion date (no later than May 31, 2024), estimated total project cost, grant amount requested, and additional participating partners.

**Section 4. Grant Objectives**

In this section, the institution will indicate which purpose of the Governor’s It’s On Us PA grant program that they will target:

* Increase mechanisms and capacity for reporting sexual violence
* Improve institutional awareness and training for the prevention of sexual violence, dating violence, domestic violence, and stalking
* Improve institutional response to sexual violence, dating violence, domestic violence, and stalking
* Implement a memorandum of understanding with local rape crisis center and domestic violence program.

Once identified, the institution will briefly summarize each of the specific goals and objectives of its proposal, explaining how each aligns with the goals of the Governor’s It’s On Us PA campaign.

**Section 5. Proposal Narrative**

The proposal narrative addresses the following criteria:

* Assess the institution’s risk factors and needs regarding sexual violence awareness, reporting, and response, and provide data to support the assessment.
* Include how the program will use the grant to address specific needs of the highest-risk members of the institution’s community. For example, the institution might consider risk from the perspective of academic progress and resources; societal issues such as sexism, racism, xenophobia, homophobia, transphobia, or ableism; socioeconomic factors such as access to physical and mental health wellness resources; as well as other populations the institution chooses to consider at risk.
* Assess the strengths and barriers within the institution’s existing prevention, reporting, and response systems. Consider results of past campus climate surveys or other data, including current data reported for Clery Act compliance, as well as indicators of progress such as awareness-raising campus groups and activities, number of It’s On Us PA pledges taken by members of the institution’s community, etc.
* In concrete terms, describe what the institution will do with the grant (i.e., grant activities). Explain how the activities address the needs, leverage, or complement the strengths, and reduce or eliminate the barriers identified above. If the institution has previously received an It’s On Us PA Grant, explain how the proposal expands or extends the previously funded work or explain the rationale for a new approach. Previous grant recipients should support this explanation with qualitative or quantitative data from the previous grant activities.
* Briefly describe how the program will be adapted, or adaptable, to pandemic and post-pandemic learning environments such as remote learning, quarantines on campus or at home, different academic calendars, changes in residential life or commuting, etc.

**Sections 6 - 10. Budget Information**

*Summary Budget Form*

The budget demonstrates fiscally sound allocation of funds to successfully provide activities related directly to the It’s On Us PA program initiatives. Round amounts to the nearest whole dollar. Grant funds may not be used for direct salaries, fringe benefits, or operational rates; however, funds can be used for honorariums and as stipends. All budgets will be reviewed to evaluate appropriateness and connection to proposed grant activities and goals.

*Compliance Objectives*

All grantees will be required to sign a grant agreement with the Pennsylvania Department of Education. All grant funds must be spent, and services performed/products received on or before May 31, 2024. The Pennsylvania Department of Education shall seek repayment of funds if it determines that funds were not utilized for the original stated and approved purpose. Grantees will be required to submit reports in the eGrants system on forms supplied by the Pennsylvania Department of Education. Final Expenditure Reports must be submitted no later than June 30, 2024. Grantees are also expected to participate in Pennsylvania Department of Education evaluation research, including staff interviews and student surveys.

*Budget Narrative*

In this section, the institution will providean explanation of the budget items above and how they relate to the objectives of your proposal. Ensure that the budget narrative demonstrates how funds will be used equitably for supporting the highest-risk community members.

**Section 11. Expected Outcome**

In this section, the institution will tie each specific goal or objective stated in the goals and objectives section of this application to an expected outcome —what we hope to see happen to show that the objective was met. The insitution should state the expected outcomes in measurable terms including baseline information and expected improvement and explain how program impact will be assessed. Prior recipients are asked to address outcomes from prior It’s On Us PA grant years and how the institution plans to build on those outcomes.

**Section 12. Additional Funding Priorities**

In this section, institutions will indicate if the proposal meets a priority area for a Governor’s 2022-23 It’s On Us PA Grant.

* Partnering or collaborating with K-12 schools, or programs that benefit or target K-12 students. For example, a postsecondary institution might collaborate with a local high school on sexual violence prevention programming.
* Developing or promoting affirmative-consent standards as part of their institution’s code of conduct.
* Programs focusing on the intersectionality of learners with disabilities and sexual assault.
* Programs/initiatives focusing on populations of learners who are more at risk for assault such as those in the LGBTQ+ community.
* Demonstrating how the program builds upon and enhances initiatives implemented by the institution in previous years.

# Review Process

Applications will be reviewed on a competitive basis by a team selected by the Office of Postsecondary and Higher Education. Applications will be reviewed for:

1. ***Alignment*** of goals and objectives in the proposal to the goals of the Governor’s It’s On Us PA Program;
2. ***Clarity*** of narrative describing programming for which funding will be used, including details of how the proposed program will improve awareness or training, reduce or eliminate barriers to reporting, or improve data collection and reporting capacity;
3. ***Improvement*** of institutions’ efforts to fully understand strengths and barriers within their existing prevention, reporting, and response systems through the development, use, or analysis of campus climate surveys or other data including current data reported for Clery Act compliance;
4. ***Correlation*** of detailed budget information with the goals and objectives of the proposal;
5. ***Viability*** of expected outcomes and alignment to program activities;
6. ***Adaptability*** of the proposal to pandemic and post-pandemic learning environments; and
7. ***Accuracy*** of the information submitted.

Applications that do not include all the required information as stated on the application will not be considered for funding. Applications that include more than 25 percent of unallowable expenses will not be reviewed or scored. All qualifying applications will be reviewed and scored.

# Scoring

The following criteria will be evaluated to rank and score applications:

1. Goals and Objectives (10 points) – Goals and objectives of the program are clearly stated.
2. Proposal Narrative (45 points) – The proposal includes a detailed description of the program, fully addressing each component of the grant application.
3. Budget information (25 points) – Budget information is aligned to the goals of the program and is accurate and itemized using a per-unit cost and total expenditure.
4. Expected Program Outcomes and Assessment (20 points) – Outcomes are stated in measurable terms including baseline information and expected improvement, and there is a clear plan for assessing the impact of the program being funded through the grant.

# Award and Disbursement

Award recipients will be notified in December 2022. All grantees will be required to sign a grant agreement with the Office of Postsecondary and Higher Education (OPHE). All grant funds must be committed, and services performed by May 31, 2024. Funding must be spent by the end of the grant period and institutions may ask for a **no-cost extension 60 days prior to the end of the grant period**. Requests made beyond that date will not be granted.

OPHE shall seek repayment of funds if it determines that funds were not utilized for the original stated and approved purpose. All unused grant funds must be returned to OPHE with the final report.

# Program Reporting and Evaluation

Upon completion of the grant, grantees will be required to submit a final report on forms supplied by OPHE. **Final reports and correlating invoices/receipts must be submitted no later than June 30, 2024.** It is highly recommended to include various individuals involved in the grant administration activities coordinate across campus to ensure everyone is aware of the program reporting and evaluation deadlines.

# Program Changes

All requests for changes to the approved grant must be submitted to the Office of Postsecondary and Higher Education in writing no later than July 31, 2023. Program changes must be approved by OPHE or the grant will be rescinded.

# Technical Assistance

Contact OPHE at [ra-editsonuspa@pa.gov](mailto:ra-editsonuspa@pa.gov%20) for technical assistance or to obtain answers to questions related to the grant application. All substantive questions must be submitted by Friday, October 14, 2022. Responses will be provided in the form of an FAQ distributed to all institutions on Tuesday, October 18, 2022.

eGrants questions should be addressed to [ra-edgrantshelp@pa.gov](mailto:ra-edgrantshelp@pa.gov). **Please ensure that staffing changes are communicated to our office so your institution maintains access to the eGrants system.**

The deadline for submission is Monday, November 14, by 11:59pm. Applications received after this time will not be considered.

1. David Finkelhor, Anne Shattuck, Heather A. Turner, & Sherry L. Hamby, “The Lifetime Prevalence of Child Sexual Abuse and Sexual Assault Assessed in Late Adolescence”, *Journal of Adolescent Health* 55, 3 (2014): 329-333, https://doi.org/10.1016/j.jadohealth.2013.12.026. [↑](#footnote-ref-1)
2. Office on Women’s Health, “Sexual Assault on College Campuses,” U.S. Department of Health and Human Services, September 13, 2018, https://www.womenshealth.gov/relationships-and-safety/sexual-assault-and-rape/college-sexual-assault. [↑](#footnote-ref-2)
3. David Cantor et al., *AAU Campus Climate Survey* (Association of American Universities, 2019), 47, 80, https://www.aau.edu/sites/default/files/AAU-Files/Key-Issues/Campus-Safety/Revised%20Aggregate%20report%20%20and%20appendices%201-7\_(01-16-2020\_FINAL).pdf [↑](#footnote-ref-3)
4. Adrienne Green and Alia Wong, “LGBT Students and Campus Sexual Assault,” *The Atlantic*, September 22, 2015, <http://www.theatlantic.com/education/archive/2015/09/campus-sexual-assault-lgbt>- students/406684/. [↑](#footnote-ref-4)
5. Matthew Kimble, Andrada D. Neacsiu, William F. Flack Jr., & Jessica Horner, “Risk of Unwanted Sex for College Women: Evidence for a Red Zone,” *Journal of American College Health* 57, 3 (2008), https://www.middlebury.edu/media/view/424768/original/2008.kimble.uws.pdf. [↑](#footnote-ref-5)
6. Bonnie S. Fisher et al., *The Sexual Victimization of College Women*, U.S. Department of Justice, Office of Justice Programs, National Institute of Justice, 2000, <https://www.ncjrs.gov/pdffiles1/nij/182369.pdf>. [↑](#footnote-ref-6)
7. “The Lethality Assessment Program: Five Years Later” (Pennsylvania Coalition Against Domestic Violence, 2017), https://www.pcadv.org/wp-content/uploads/pcadv-lap-5-year-anniversary-report.pdf. [↑](#footnote-ref-7)
8. Sharon G. Smith et al., “The National Intimate Partner and Sexual Violence Survey: 2015 Data Brief-Updated Release” (Centers for Disease Control and Prevention, 2015), https://www.cdc.gov/violenceprevention/pdf/2015data-brief508.pdf. [↑](#footnote-ref-8)