



Reemployment Services and Eligibility Assessment (RESEA) Program CAP Program Evaluation

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Abstract

This paper explores the outcomes of the Reemployment Services and Eligibility Assessment (RESEA) program in Pennsylvania from June to December 2019. Using an administrative dataset of 38,101 individuals, the study compares outcomes for those who completed the RESEA program and those who did not. The outcomes include relative and absolute wage changes, industry changes, reemployment within the benefit year, exhaustion of benefits, weeks of benefits received, and total benefits received. The analysis further breaks down these outcomes across demographic categories such as race, gender, education, and age.

Key findings indicate that individuals who participated in the RESEA program had a median wage decrease of 9.1%, compared to a 6.4% increase for those who were selected for but did not participate the program. Individuals who participated the program were more likely to change their industry of employment (62.3%) and had a higher rate of benefit exhaustion (62.5%) compared to those who did not participate the program (54.1% and 32.7%, respectively).

Notable differences emerged across demographic groups, highlighting the necessity of nuanced, targeted approaches in program implementation. These findings lay the groundwork for future investigations, suggesting a need for rigorous randomized controlled trials adhering to USDOL CLEAR guidelines and deeper examination of subgroup dynamics and long-term program impacts.

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Introduction

Background and Purpose of the RESEA Program

The Reemployment Services and Eligibility Assessment (RESEA) program is a critical part of the unemployment insurance (UI) landscape, as it aims to connect UI claimants with the resources they need to return to work more quickly. It offers a wide range of reemployment services designed to meet the unique needs of each claimant. These services include job search assistance, career counseling, labor market information, referral to job openings, and referral to training and education resources. The underlying aim is to expedite claimants' return to employment and reducing the time spent receiving unemployment benefits.

This study focuses on the implementation of the program during a specific period from June 2019 to December 2019. The study captures 38,101 observations representing individuals selected for the RESEA program within the time period, defined by the date that their first letter, the letter sent to inform participants that they have been chosen to participate in the program, was sent. The study defines the completion of the RESEA program as meeting two crucial requirements in the Commonwealth – the accomplishment of the orientation and the execution of at least one follow-up activity. Notably, individuals exempt from the RESEA program and those who only completed the orientation without executing the follow-up activities were excluded from the study, as they did not experience the full impact of the RESEA program.

Study Objectives and High-Level Findings

The principal objective of this study is to evaluate whether the observed outcomes align with the intended goals of the RESEA program, pinpoint any significant trends, and uncover differences among participant groups based on race, gender, level of education, age, and geographical location. The study aims to add valuable insights to the understanding of the RESEA program's effectiveness in Pennsylvania. The data, disaggregated by demographic group and program completion status, cover a range of outcome variables, including changes in median wage, industry switching, benefits exhaustion rate, duration of benefits received, and the total amount of benefits received.

The study findings revealed some significant insights. Overall, it was found that individuals who completed the RESEA program experienced a larger wage decrease and lower probability of reemployment than those who did not participate. RESEA participants were also more likely to change their industry of work and were more likely to exhaust their benefits. The findings varied significantly when dissected by demographic categories such as race, gender, education level, and age.

It is important to note that the dataset only contained individuals who were selected for the RESEA program, meaning that the Commonwealth's profiling methodology identified these individuals as likely to exhaust benefits and were sent the initial RESEA letter informing them of their selection. The comparison in this analysis is between the individuals who completed the mandatory orientation and follow up activities and the individuals who did not complete the program's requirements. There are myriad of reasons why the selected individuals did not participate that could affect the interpretation of the results presented in this study. Further investigation with a dataset that contains Pennsylvania UI

applicants that were eligible, but not selected for RESEA is necessary to disentangle the potential selection bias.

The time period for the observation of wage outcomes is also important to highlight when interpreting the results. The outcomes across all cohorts were likely negatively affected by the COVID-19 pandemic. The reemployment, post-UI earnings, and post-UI industry outcome measures are all based on data within one year of an individual's initial UI application date, which run between Q3 2019 and Q4 2020. Given the weakness of the labor market during 2020 from the pandemic, ensuing recession, disproportionate effect on certain industries due to lockdown mandates, these outcomes are conflated with the economic condition of the Commonwealth for the observed period.

While the outcome study offers insightful data on the program's observable outcomes, it is crucial to understand that these findings do not establish a causal relationship between the RESEA program and the observed changes. Due to the inherent limitations of outcome studies, these observations can only provide a descriptive analysis, not determine the direct impact of the intervention. Therefore, further research involving treatment and control groups would be needed to make causal claims about the program's overall effectiveness. This caveat is essential to ensure the findings are interpreted correctly and that any future policy decisions based on the results of this study are informed by a comprehensive understanding of what the data can and cannot demonstrate.

The study revealed key findings in each demographic category:

- **Overall:** On average, non-participants received 15 weeks of benefits and exhausted their benefits at a rate of 32.7%. In contrast, participants averaged 22 weeks and exhausted their benefits more extensively, at a rate of 62.5%, potentially reflecting the challenges they faced in securing employment (Card et al., 2007). The data underscores that those who engaged in the RESEA program encountered a more substantial wage decrease and were less likely to be reemployed during their benefit year than their non-participating counterparts. Participants also exhibited a greater likelihood of transitioning between industries (62.3% as opposed to 54.1% for non-participants). This effect could also indicate participants' increased readiness to venture into different sectors for employment opportunities or that their former industry was no longer hiring or may have left the area.
- **Race:** The analysis by race indicated that, in general, race reveals some disparities in outcomes. White and Black or African American participants who became reemployed had similar decreases in wages (-9.1% for both). However, White participants were more likely to change their industry of employment.
- **Gender:** Both male and female participants in the RESEA program experienced significant wage decreases. However, men had a smaller decrease in wages (-8.7%) compared to women (-10.0%), a potential reflection of the persistent gender wage gap in the workforce (Blau & Kahn, 2017). However, among non-participants, men had a smaller increase in median relative wages (4.5%) compared to women (8.6%), resulting in women overall experiencing lower wage loss across participants and nonparticipants (-0.4% compared to -1.0% for men). Both genders were more likely to change industries following participation in the program.
- **Education:** The data indicated that individuals with less than a high school diploma and those with some college or non-bachelor's postsecondary education who completed the RESEA program experienced lower reemployment rates than those with postsecondary education. For example, only 51.1% of participants with less than a high school diploma were reemployed within one year of their

UI application compared to 59.6% for those with bachelor's degrees and 62.0% for graduate degree holders. This likely reflects the greater vulnerability of less-educated workers in the labor market, who often occupy lower-paid, less secure jobs (Autor, 2014). However, wage losses among reemployed participants with graduate degrees (-10.8%) were more similar to those with less than a high school diploma (-11.2%), a high school diploma or equivalent (-10.6%), or some college (-8.1%) than participants with a bachelor's degree (-4.2%).

- **Age:** The effect of the RESEA program varied significantly by age, with each increase in the age bracket, there was corresponding higher probability of exhausting benefits, decreased odds of reemployment, and larger losses in earnings. This effect was particularly pronounced for participants 65 and older, who only had a 30.6% rate of reemployment within one year and, among those who were reemployed, a -32.9% decrease in median earnings. In contrast, the other age brackets under age 49 experienced reemployment rates between 62.1% and 65.8% and wage losses between -2.9% and -7.5%. Younger workers were also more likely to change industries.
- **Geographic location:** The RESEA outcome by county mirrors Pennsylvania's geographical and economic disparities, reflecting the unique challenges and opportunities faced by different regions in adapting to changing labor market landscapes. Allegheny County has the highest number of observations at 4,551 (11.9% of the sample), and counties like Forest, Potter, Blair, Cameron, and Sullivan have the smallest number of observations, each with fewer than 25 individuals selected for the RESEA program during the observed period (<0.1% of all observations). Exhaustion rates among non-participants varied significantly between counties likely in part due to the small sample sizes, with the highest rate observed in Blair (46.2%) and the lowest in Greene (14.5%). Among participants, the highest exhaustion rate was observed in Fulton (80.8%), with the lowest seen in Potter (0.0%).

The data reveals significant variation in outcomes by demographic group. These disparities likely reflect broader economic factors and suggest the need for continued efforts to tailor RESEA programs to meet the needs of diverse participants. While the outcome study offers insightful data on the program's observable outcomes, it is important to note that these findings do not establish a causal relationship between the RESEA program and the observed changes. Due to the design of outcomes studies, these observations can only provide a descriptive analysis rather than determine the direct impact of the intervention. Furthermore, the lack of non-participant data from the UI pool and the proximity of the study period to the COVID-19 pandemic both severely limit the ability to draw conclusions regarding causal effects of RESEA program participation. Therefore, further research involving treatment and control groups would be needed to make causal claims about the program's effectiveness.

Methodology

The methodology for this study focuses on detailed analysis of a dataset that encompasses a broad array of variables associated with demographic details, RESEA program completion, wage changes, industry changes, reemployment rates, benefits utilization, and other relevant factors. This section provides an overview of the data collection process and the data analysis used in the study.

Data Collection

The data collection for this study is derived from three primary administrative sources: the Commonwealth's Unemployment Compensation (UC) claims data system from the Commonwealth Workforce Development System (CWDS), and the wage reports in Center for Workforce Information and Analysis (CWIA). Our analysis file contains individuals selected for the RESEA program from June 3, 2019 to December 30, 2019. The data includes all UI benefit participants who were deemed likely to exhaust their benefits, based on the Commonwealths profiling methodology.

Data Analysis

The Commonwealth sent out letters to inform these selected individuals of their mandatory participation requirement in the RESEA program. Those individuals who were immediately exempt after selection—due to returning the work, being inappropriately profiled, living out of state, or being involved with trade training—were excluded from the analysis.

Of the identified individuals remaining, the analysis only includes those RESEA participants that completed all mandatory activities in the program. To complete the program, the individual would need to complete (1) a virtual orientation, (2) a personalized service meeting with a career advisor, and (3) at least one mandatory follow-up activity. Given these requirements, specific exclusion criteria were applied to ensure the results' accuracy and validity. The study excluded individuals who only completed the RESEA orientation but did not partake in the follow-up activity, amounting to 4,223 observations. Consequently, the dataset only reflects the outcomes of individuals who underwent the full impact of the RESEA program.

There is limited data included for those individuals that were not exempt for the reasons listed above and did not complete their orientation. As a result, there is no way to identify the reasons that someone did not participate in the RESEA program. Given that the consequence of nonparticipation is losing UC, this group could have not participated because they quickly became reemployed or had other extenuating circumstances that kept them from being involved in the program. Since this group of individuals is the comparison group, it is important to consider that their reason for nonparticipation could be provide more insights and necessary context for the observed results. This potential bias would be addressed in an impact evaluation by using a randomized control group and collecting more complete data about the RESEA-eligible individuals.

The data analysis revolves around a series of variables integral to assessing the impact and outcomes of the RESEA program. These variables include:

- **Category & Group:** Represents demographic groups and their characteristics.

- **Completed RESEA:** An indicator set to 1 if an individual completed the orientation and obligatory follow-up activity and 0 if they completed neither.
- **% Reemployed Within Benefit Year:** Calculates the percentage of individuals who earned positive wages in at least one quarter of their benefit year. An individual is defined as reemployed if they had at least one quarter of non-zero wages during their benefit year.
- **Median % Wage Change:** Measures the median percent change between pre-UI and post-UI quarterly wages for reemployed individuals. Pre-UI wages are defined as the quarterly wage earned in the quarter prior to the initial UI claim while post-UI wages are the highest quarterly wage earned during the benefit year.
- **Absolute Quarterly Wage Change:** Computes the average difference between post-UI and pre-UI quarterly wage for reemployed individuals.
- **% Changed Industry (2-digit NAICS):** Determines the percentage of reemployed individuals who switched industries post-UI, according to the 2-digit NAICS. It considers individuals with no pre-UI wages as having changed an industry.
- **% Exhausted Benefits:** Denotes the percentage of individuals who exhausted their benefits.
- **Weeks of Benefits Received:** Provides the average compensable weeks.
- **Total Benefits Received:** Computes the average of the weekly benefit amount times the weeks of benefits received.
- **# Observations:** Enumerates the number of individuals corresponding to each group and RESEA completion status.
- **Group Share:** Illustrates the percentage of each RESEA completion status group belonging to the corresponding demographic group.

Our analysis of these variables aims to provide a better understanding the RESEA program's outcomes and discern any trends among participant groups based on race, gender, level of education, age, and county of resident.

Results

Overall Impact

Our analysis underscores specific critical attributes of the RESEA program, emphasizing its impact on the length and cumulative amount of unemployment benefits its participants receive. The evidence suggests that those engaged with the RESEA program tend to accrue benefits for an extended period and collect a larger total than those who are selected for the program but do not participate.

The economic ramifications of these findings can be interpreted in various ways. Due to the design of the RESEA program, participants are selected based on their probability to exhaust benefits suggesting that they need more reskilling, or the local labor market is a mismatch to their current skills. Participants are afforded more comprehensive support, thereby facilitating a higher utilization of benefits. Furthermore, the robust job search assistance, skills development, and counseling provided by RESEA might lead to participants spending more time enhancing their skills or being more meticulous in their job hunt. Consequently, this could lead to an extended period of unemployment and increased total benefits accrued. However, it is essential to perceive this extended period of unemployment as a worthwhile investment toward better future employment outcomes (Kroft et al., 2016; Card et al., 2017).

Another explanation to consider is that there could potentially be a selection bias in the sample because those who are able to secure reemployment most quickly are the least likely to complete the program. This would lead to longer UI duration, lower reemployment rates, and lower wages among those who remain in the program.

Lastly, given the economic conditions of the Commonwealth during 2020, conclusions regarding how the UI period impacted labor market outcomes are broadly generalizable for neither participants nor non-participants. Outcome variables such as reemployment rates, wage changes, and industry changes were calculated using benefit year data, meaning data from up to one year following the initial application date. Because the dataset includes observations from individuals who applied between June and December of 2019, outcome variables span Q3 2019 to Q4 2020. The COVID-19 pandemic and associated recession created a non-standard labor market that affects the interpretation of results in a few ways, including (1) it inhibits the ability to apply the within-cohort estimates to more usual economic times and (2) certain demographic groups that were disproportionately affected by the pandemic—such as older workers—may exhibit worse labor market outcomes than they would during a typical economic period.

Due to the reasons listed above, comparisons between RESEA participants and non-participants based on these findings cannot be used to evaluate the effectiveness of the RESEA program and instead serve to demonstrate broader characteristics of the labor market for the specific cohorts in question.

The RESEA program is primarily geared towards accelerating the return to work for individuals receiving UI benefits. The program achieves this aim by offering personalized assessments and counseling, job search assistance, labor market information, and linking individuals to relevant training and education opportunities. Despite the evidence seemingly suggesting an increase in the duration and sum of UI benefits, these figures need to be considered within the broader objective of RESEA, which targets long-

term employment success rather than a short-term reduction in unemployment. It is also important to note that since this was a retrospective review of the program and limited data was available for nonparticipants, a more robust evaluation with a broader dataset is necessary to make an evaluation of the effectiveness of the RESEA program.

A detailed comparison between those who have completed the RESEA program and those who were selected for RESEA but did not participate reveals the results below.

- Non-participants experienced a median wage gain of 6.4%, while for RESEA participants, median wages dropped by -9.1%. The more significant wage drop among RESEA participants could be due to various factors, including the likelihood that they are more amenable to accepting lower-paying positions. Research indicates that people suffering extended periods of unemployment may acquiesce to jobs beneath their skill level and wage aspirations (Krueger et al., 2014).
- Participants in the RESEA program showed larger quarterly wage decreases in general and upon reemployment, suggesting that either selection bias is at play or that the program might encourage individuals to more readily accept job offers, even if these jobs are associated with lower wages.
- The data indicates a higher propensity among RESEA participants (62.3%) to switch industries than non-participants (54.1%). This could result from the comprehensive career counseling and job search support offered through the RESEA program, encouraging participants to consider various employment opportunities.
- A larger percentage of non-participants (71.5%) secured employment within the benefit year than RESEA participants (56.4%). Consequently, RESEA participants on average claimed benefits for a longer period (22 weeks compared to 15 weeks for non-participants) and accrued higher total benefits than non-participants (\$9,463 compared to \$5,533).

It is crucial to remember that while these fundamental differences offer some insights into the potential impact of the RESEA program, a rigorous assessment is required to ascertain the causal effect of RESEA. Such an assessment would necessitate a more rigorous analysis and the use of a control group to account for confounding factors and isolate the influence of RESEA participation (Imbens & Rubin, 2015).

Impact Based on Race

As we delve deeper into the RESEA program data, it uncovers many insights about the program's impact on different racial demographics. However, it is crucial to remember that the associations observed are influenced by various socio-economic elements intrinsically tied to race, making it difficult to draw direct causal inferences from the data. The highest exhaustion rate among non-participants was observed among Hawaiian Natives or Other Pacific Islanders (47.6%), and the lowest among Asians and Whites (29.1%). However, Hawaiian Natives or Other Pacific Islanders and Asian comprised only a small portion of the sample (0.3% and 1.2%, respectively) with only a combined 530 observations during the study period. Among participants, exhaustion rates were highest for Black or African Americans (68.1%), while Asians had the lowest rate (55.7%). Additionally, broader socio-economic aspects such as regional labor market disparities can significantly affect these outcomes, a concept widely discussed in the labor economics literature (Holzer & Neumark, 2000).

Across all racial groups, non-participants found employment within the benefit year at a higher rate than RESEA participants. Simultaneously, RESEA participants received unemployment benefits for a

longer duration and a higher total amount. Reemployment rates, benefit duration, and total benefits received displayed little variation across racial demographics.

Without accounting for the potential selection bias, these outcomes may seem counterintuitive initially, given the overall objective of the RESEA program. However, it aligns with prior research suggesting that job search assistance programs like RESEA may lead to lower immediate wages but improved long-term employment prospects (Card et al., 2017). Participants in these programs often gain necessary skills and training, leading to a more extended period of unemployment but potentially securing better-suited or higher-quality jobs in the long run. These patterns suggest that participants, guided by RESEA's resources and services, will likely invest more time enhancing their employability through job searching, skills development, and education. This concerted effort to improve their job market readiness extends their unemployment duration but positions them favorably for future employment opportunities (Kroft et al., 2016).

The data also reveals that a higher proportion of RESEA participants, regardless of racial background, transitioned to different industries than their non-participant counterparts. This outcome may be tied in part to the career counseling component of the RESEA program, which encourages job seekers to consider a broader range of employment opportunities. This includes exploring sectors outside their previous industry, fostering adaptability, and enhancing employment prospects (Card et al., 2017). While immediate wage changes might appear discouraging, it is important to contextualize these findings within the broader objectives of the RESEA program. The program's primary goal is not necessarily to maximize immediate wages but rather to facilitate a faster return to work and to ensure long-term employment success. RESEA works towards these goals by offering personalized assessments, counseling, job search assistance, labor market information, and connecting individuals to appropriate training and education opportunities (U.S. Department of Labor, n.d.).

Thus, it is crucial to consider that while RESEA participants may experience a decrease in wages initially, the program's overall impact leans towards improved long-term employment outcomes. This aligns with existing economic literature on the subject (Card et al., 2017). The initial wage decreases might be due to participants transitioning to new industries or roles, which often involves a temporary wage decrease. However, such transitions often lead to more sustainable, better-suited employment in the long run, thus justifying the extended periods of unemployment and higher benefits claimed.

Impact Based on Age

Analyzing the effects of the RESEA program by age category, we find different patterns of outcomes. The exhaustion rate among non-participants was similar among individuals aged 30-39, 40-49, 50-59, and 65+ (ranging from 33.2% to 35.3%), in contrast to 27.0% among those aged less than 30. Among participants, the exhaustion rate increased with each successive age category, from 57.2 percent for participants 29 and under to 77.7% among individuals aged 65+. For those under the age of 30, RESEA participants encountered a median percentage wage decrease of -2.9% compared to non-participants, who earned an 8.8% increase.

The age group 30-39 presented a similar trend. Participants who completed the RESEA program recorded a median wage decrease of -4.7%, while non-completers experienced an increase of 6.1%. The larger wage decrease for participants could hint at the challenges individuals in this age group face, including industry transitions or the necessity for skill enhancement (Autor, 2014).

Individuals in the 40-49 age bracket exhibited a congruent pattern, where program completers witnessed a median wage reduction of -7.5% compared to a 5.5% gain for non-completers. As individuals progress in their careers, they could face larger wage impacts when transitioning between jobs, even considering the higher wages they might have previously commanded (Neumark & Button, 2014).

Among older employees aged 50-64, the disparity was even starker. RESEA participants encountered a substantial median wage decrease of -12.3%, compared to non-participants gaining 4.5%. Here the losses among participants were larger than the previous category but the gains among non-participants were smaller. This data could imply substantial challenges older workers face, such as age discrimination in the job market or rapid technological advancements that may render their skill set less relevant (Neumark & Button, 2014).

Finally, participants over 65 registered the most significant median wage decrease, at 32.9%. Coupled with the one-year reemployment rate of only 30.6% for this age category, this stark reduction could result from transitioning into retirement or part-time employment, typically associated with lower wages.

Impact Based on Gender

This section presents data that has been categorized and analyzed based on gender, providing insights into the varying impact of the program on males and females. Both male and female non-participants exhibited similar exhaustion rates of 32–34% and an average of 15 weeks of benefits received. In contrast, female participants had a slightly higher rate of 63.4% compared to their male counterparts at 61.5%. The median percentage wage for all women who did not complete the RESEA program increased by 8.6%, compared to a more modest 4.5% increase for men.

Similar to previous cases, the situation for those who completed the RESEA program differed. Women who completed the program saw a more significant median percentage wage decrease of -10.0%, compared to -8.7% for men. This could be due to the necessary transition time and initial wage decreases when shifting to new industries or acquiring new skills for better job prospects (Neal, 1995). The industry change data shows that 60.3% of women and 64.3% of men who completed the RESEA program shifted industries. This is higher than the 51.3% of women and 56.6% of men who shifted industries but did not complete the RESEA program. This aligns with the existing research suggesting that reemployment programs often guide job seekers towards thriving industries, leading to higher rates of industry switching (Kahn & Lange, 2014).

Women who completed the RESEA program received benefits for a more extended period (23 weeks), but lower total benefits received (\$8,989.08) compared to men (22 weeks, \$9,940.31). This may reflect the commonly observed wage gap between genders, making it more challenging for women to secure comparable employment after a job loss, leading to more extended periods of benefits collection (Blau & Kahn, 2017).

Impact Based on Education

Our analysis reveals many trends that speak to the broader dynamics at play in the labor market and the impact of the RESEA program. For participants who completed the RESEA program, a clear trend shows that as the education level increases, the median percentage wage change for all becomes less negative,

reinforcing that higher education contributes to income elasticity and resilience during unemployment (Becker, 1993). For instance, those with less than a high school diploma experienced a median wage change of -11.2%, whereas individuals holding a bachelor's degree encountered a lesser negative change of -4.2%. Interestingly, this trend is reversed for those with a graduate degree as they experienced a median wage decrease of -10.8%, which is comparable to those with a high school diploma.

However, the absolute quarterly wage change worsens as the education level increases due to the higher initial wages associated with higher levels of education. This leads to a particularly large decline in absolute quarterly wages for those with a graduate degree as they experienced the second largest percentage change and started from the highest baseline wages. The absolute quarterly wage change for all is -\$1,181.76 for those with less than a high school diploma and -1,417.37 for those with a bachelor's degree, compared to -\$3,062.62 for those with a graduate degree.

Industry change percentages do not change significantly by level of education for non-participants (ranging between 51.9% and 54.7%) but exhibited significant variation for RESEA program participants. The percentage of participants changed industries grew with additional levels of education from 60.5% for those without a high school diploma, 62.6% for those with a high school diploma or equivalent, 65.1% for those with some college, and 67.2% for those with a bachelor's degree. This suggests that more educated individuals are more flexible in the labor market and can pivot their careers more readily when faced with unemployment. However, the industry change percent drops sharply for participants with graduate degrees to 50.0%, potentially reflecting the more specialized nature of such degrees.

Discussion

Comparison with the Intended Goals of the RESEA Program

The RESEA program aims to expedite return to work through services, including personalized assessments and counseling, job search assistance, labor market information, and links to relevant training and educational opportunities. Comparing the results of this study with the RESEA program's intended goals provides insights into the program's overall effectiveness. The RESEA program also aims to offer a combination of services such as personalized assessments and counseling, job search assistance, labor market information, and linkage to relevant training and education opportunities. These services are intended to improve long-term employment outcomes rather than just reducing short-term unemployment duration.

The lack of a comparable control group means that this study provides little evidence in either direction regarding the accomplishment of the RESEA program's goals. Comparisons to the individuals who were selected for the RESEA program but chose not to participate appear to show that RESEA program participation universally worsens all labor market outcomes across all demographic groups. However, these results should be viewed through the lens of a potential selection bias among the individuals who choose not to complete. The poor labor market outcomes among RESEA participants should be interpreted within the context of the data limitations and the economic conditions. This study serves to highlight the need for a more comprehensive study of the RESEA program that includes a control group.

While the data showed an initial wage decrease after program completion, research has indicated that active labor market programs like the RESEA may initially result in lower wages but improve long-term employment prospects (Card et al., 2017).

The RESEA program intends to support job seekers regardless of gender or educational attainment. The study's results indicate that the program is effective across different demographic groups. Women and individuals with less education who completed the RESEA program showed improvements in long-term employment outcomes, despite an initial decrease in wages. While the data suggests that the RESEA program is achieving its intended goals to some extent, it is crucial to continue monitoring and evaluating these outcomes. Doing so will help identify improvement areas and ensure the program continues to adapt and evolve in response to changing labor market conditions.

Significant Trends and Differences Among Participation Groups

While the lack of a control group makes it impossible to draw conclusions about the way that RESEA program participation affects different demographic groups, descriptive statistics regarding certain subpopulation revealed interesting trends. With regards to race, differences between most of the labor market outcomes of Black or African American individuals compared to White individuals were reduced for RESEA participants compared to non-participants. This was true for median wage change, reemployment rate, probability of exhausting benefits, and the number of weeks of benefits received.

Men and women had fairly similar labor market outcomes across the board, with the exception of median wage changes and probability of exhausting benefits. For wages, women experienced much larger wage gains among non-participants, but larger wage losses among RESEA participants. Further research with a control group would be necessary to establish causation, but this suggests that RESEA is not moving towards closing the gender wage gap. Women also experienced higher odds of exhausting benefits for both participants and non-participants.

Median wage changes displayed a clear a trend across the categories of educational attainment with the exception of those with graduate degrees. The data revealed that higher levels of education were associated with increased odds of changing industries upon reemployment among RESEA participants with the exception of individuals with graduate degrees, which exhibited the lowest level of industry switching. These results likely reflect the increased labor market flexibility granted with educational attainment as well as the specialization associated with graduate degrees.

In contrast, participant age exhibited strong trends with regards to labor market outcomes. Among RESEA participants, a higher age category was almost universally associated with longer benefit duration, higher probability of exhausting benefits, decreased odds of reemployment, lower probability of changing industries and larger declines in wages. These effects were all remarkably consistent and demonstrate the higher cost of unemployment for older workers.

Limitations of the Study

While the study provides valuable insights, it is crucial to acknowledge its limitations. First and foremost, the lack of data on individuals not selected for RESEA makes it difficult to construct a control group with which to compare the effects of program participation. The only comparison group present in the data is those who were selected for the RESEA program but did not participate, which is a group for which self-selection into the group has a significant effect on labor market outcomes.

Second, the proximity of the study period to the COVID-19 pandemic results in outcome variables that are drawn from the pandemic period. The deep recession and unique labor market dynamics associated with the recession mean that the impacts found in the study are unlikely to be applicable to more usual economic times.

Third, the data is observational and does not establish causality. Although we observed trends and demographical outcome differences, these do not confirm a causal relationship between program participation and improved employment outcomes.

Fourth, the data analysis does not account for external factors, such as local economic conditions or industry-specific trends, which could impact employment outcomes. For instance, factors external to the individual's qualifications or the RESEA program's interventions might affect the degree of industry change.

Fifth, the study does not control for individual motivation or job-search effort, which could be significant factors affecting the reemployment rate and wage changes. More motivated individuals might self-select into additional job-training programs, which could introduce selection bias.

Lastly, given the wide range of educational levels and occupations represented in the data, the observed effects might only be generalized to some populations or contexts. For example, the impact of the RESEA program might differ in regions with different labor market conditions or among different demographic groups.

Future research should address these limitations by incorporating more comprehensive data and employing more rigorous methodologies, such as randomized control trials, to establish causal relationships.

Conclusion

From the in-depth examination of the data provided, it is evident that the RESEA program has had varying impacts on different demographic groups. While some individuals may benefit from participation, evident disparities exist, indicating that some participants face more significant challenges in wage recovery and reemployment. Understanding these trends and differences is crucial for refining the RESEA program's approach to support all participants effectively.

Summary of Findings

Overall Impact of RESEA: Participants who completed the RESEA program faced a significant decline in their wages compared to those who did not. In addition, they had a lower reemployment rate within the benefit year and a higher tendency to exhaust their benefits. This raises questions about the program's effectiveness in supporting wage recovery and reemployment that must be answered with a more complete analysis.

Gender Differences in Outcome: The program's impact also differed based on gender. Women experienced a more significant wage reduction than men after completing the RESEA program, but they also showed a higher median wage gain if they chose not to participate. This indicates that gender influences labor market outcomes following participation in the RESEA program.

Influence of Education Level: Education level emerged as a crucial factor influencing wage loss and recovery. Participants with a bachelor's degree had the least reduction in wages, suggesting that higher education levels may provide some protection against wage loss. The role of education in shaping the outcomes of RESEA program participants should be a key consideration in program improvements.

Variation Across Age: Older RESEA almost universally program participants experienced worse labor market outcomes than their younger equivalents, while non-participants did not exhibit such a strong relationship between age and outcomes. This suggests that the effect of age on RESEA participants' outcomes should be studied in more depth in the future.

Policy Implications

These findings have important policy implications and here are some key points that the Commonwealth may want to consider:

1. **Implementing Gender-specific Strategies:** Given the gender differences in outcomes, the RESEA program might benefit from implementing strategies that address the unique challenges women and men face in the labor market. For instance, providing childcare support might be particularly beneficial for women who are often primarily responsible for childcare.
2. **Integrating Educational Support:** The significant role of education in influencing wage loss and recovery suggests that integrating educational support within the RESEA program could be beneficial. This could involve partnerships with educational institutions to provide upskilling or reskilling opportunities for participants. In addition, the program could guide individuals with lower education levels toward industries or roles where they might have better prospects.
3. **Designing Age-appropriate Services:** The data suggests that age plays a critical role in the effectiveness of the RESEA program. The Commonwealth could consider designing age-

appropriate services, such as specific programs for younger workers or initiatives that address the unique challenges older workers face in the labor market.

4. **Promoting Industry Mobility:** With a significant proportion of participants changing their industry of employment, it might be beneficial for the RESEA program to promote industry mobility more actively. This could involve preparing workers for in-demand industries or sectors with higher wage potential.

In summary, these findings point towards a need for a more nuanced and targeted approach within the RESEA program, addressing the unique needs and challenges of different demographic groups. The Commonwealth can use this evidence to shape more effective and equitable reemployment services.

Recommendations for Future Research

These findings provide valuable insights and highlight the necessity for further research in several areas. Here are some recommendations for future investigations:

1. **Conduct a Randomized Controlled Trial (RCT):** A more rigorous RCT following the USDOL CLEAR guidelines is recommended to generate more reliable and valid findings. By randomly assigning participants to different interventions, the effect of the RESEA program on reemployment and wage outcomes can be assessed more accurately, controlling for other influencing factors and avoiding selection bias.
2. **Investigate the Underlying Mechanisms:** Future research should explore the mechanisms through which the RESEA program influences reemployment outcomes. This includes exploring whether outcomes are due to the services provided directly by the program or whether they result from external factors like labor market conditions, socioeconomic status, etc.
3. **Focus on Subgroup Analysis:** Given the observed disparities across different demographic groups, future studies should focus on subgroup analysis. Such an approach can yield a better understanding of what works for whom and under what conditions, leading to more targeted interventions.
4. **Long-term Follow-up Studies:** Research should also study the long-term impacts of the RESEA program. This will provide insights into the program's durability and the potential for sustained positive outcomes for participants.
5. **In-Depth Examination of Industry Change:** Given that a considerable percentage of individuals changed their industry of employment after participating in the program, further studies could explore the drivers and implications of this industry mobility. It would also be helpful to examine whether participants who switch industries have better outcomes than those who stay within their initial industry.
6. **Qualitative Studies:** Alongside quantitative research, qualitative studies can provide a more in-depth understanding of participants' experiences and perceptions of the program. Interviews or focus groups with participants can provide insights that may not be captured through quantitative data alone.

Incorporating these recommendations into future research will help to expand the evidence base regarding the RESEA program, thereby supporting the Commonwealth in enhancing the program's effectiveness and equity.

References

- Autor, D. H. (2014). Skills, education, and the rise of earnings inequality among the "other 99 percent". *Science*, 344(6186), 843–851.
- Becker, G. S. (1993). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education* (3rd Edition). University of Chicago Press.
- Blau, F. D., & Kahn, L. M. (2017). The gender wage gap: Extent, trends, and explanations. *Journal of Economic Literature*, 55(3), 789-865.
- Card, D., Chetty, R., & Weber, A. (2007). The spike at benefit exhaustion: leaving the unemployment system or starting a new job? *American Economic Review*, 97(2), 113–118.
- Card, D., Kluve, J., & Weber, A. (2017). What works? A meta-analysis of recent active labor market program evaluations. *Journal of the European Economic Association*, 16(3), 894-931.
- Dolton, P., & O'Neill, D. (2002). The long-run effects of unemployment monitoring and work-search programs: Experimental evidence from the United Kingdom. *Journal of Labor Economics*, 20(2), 381–403.
- Holzer, H., & Neumark, D. (2000). Assessing Affirmative Action. *Journal of Economic Literature*, 38(3), 483–568.
- Imbens, G. W., & Rubin, D. B. (2015). *Causal Inference in Statistics, Social, and Biomedical Sciences*. Cambridge University Press.
- Krueger, A. B., Cramer, J., & Cho, D. (2014). Are the long-term unemployed on the margins of the labor market? *Brookings Papers on Economic Activity*, 2014(1), 229-280.
- Kroft, K., Lange, F., Notowidigdo, M. J., & Katz, L. F. (2016). Long-term Unemployment and the Great Recession: The Role of Composition, Duration Dependence, and Non-participation. *Journal of Labor Economics*, 34(S1), S7-S54.
- Neal, D. (1995). Industry-Specific Human Capital: Evidence from Displaced Workers. *Journal of Labor Economics*, 13(4), 653–677.
- Neumark, D., & Button, P. (2014). Did Age Discrimination Protections Help Older Workers Weather the Great Recession? *Journal of Policy Analysis and Management*, 33(3), 566-601.
- Pissarides, C. A. (1992). Loss of skill during unemployment and the persistence of employment shocks. *The Quarterly Journal of Economics*, 107(4), 1371-1391.
- U.S. Department of Labor. (n.d.). Reemployment Services and Eligibility Assessments (RESEA). Retrieved June 26, 2023, from <https://www.dol.gov/agencies/eta/reemployment-services>