RECRUITMENT

BARRIERS AND OPPORTUNITIES FOR MILITARY CANDIDATES

Evaluation Division
July 2016

CONTENTS

EXECUTIVE SUMMARY

This review examines the experiences of a cohort of Defence Force applicants as they progress through all phases of the recruitment process. The project aims were to:

- Investigate the factors which assist candidates to successfully complete recruitment and to identify the most challenging parts of the process for applicants.
- Examine the specific challenges faced by female and ethnic minority candidates.

The cohort consisted of 2597 candidates who applied to join the Defence Force during the period between June 2014 – January 2015. The following report outlines the characteristics of the overall cohort as well as undertaking a detailed analysis of outcomes throughout the process for the 885 applicants who successfully completed screening. Additionally, an analysis of survey data from a sub-sample of the cohort candidates (902) on their personal experiences of the recruitment process was undertaken. The findings of this report were subject to both internal and external quality assurance mechanisms in order to ensure the accuracy to the data analyses and interpretations.

Findings

The New Zealand Defence Force, just like all other modern militaries, faces a number of challenges in recruiting the right people for the right roles. In order to achieve the desired mix of skills for the future force, the recruitment process must be well-executed, draw upon a wider pool of potential candidates than ever before, and focus on identifying the best fitting candidates for both the current and future force. Effectively, simply having sufficient numbers of candidates apply for roles in the Defence Force is not enough to ensure that the best candidates are succeeding through all of the stages of recruitment as people experience the process in different ways.

This review identified a number of positive factors in the recruitment process. Firstly, the process utilises a series of stages that deliver intakes of recruits who achieve the comprehensive criteria[1] for selection. Secondly, the system is built to treat all candidates in the same way, and there is no evidence for explicit bias in the process. Thirdly, the Defence Force is an attractive employer; most candidates are highly motivated to join and many applicants who are declined or withdraw wish to reapply in the future.

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[1] The process delivers quality candidates who meet fitness, aptitude, and organisational fit requirements.

A number of challenges were also found, all of which are outlined full in this review, and summarised below:

1. **The recruitment process is complex and difficult to navigate.**
   There are many steps in the recruitment process and this has implications for the way in which data is collected, tracking of how many candidates complete each stage, and the experience of all candidates throughout the process.

   a. **Recruitment resources are expended in screening out large numbers of candidates at the first stage of the process.** 66% of all the cohort applicants did not progress past screening. A large amount of effort and resource is spent on this first stage of the process in order to make sure that applicants meet minimum entry requirements. Automating and standardising methods of screening out non-eligible candidates could reduce wastage at this stage.

   b. **Performance of the recruitment system is not assessed against a set of standardised criteria, nor tracked over time.** Applicants' drop-off in high rates during the process for many reasons, resulting in 190 of the cohort candidates being selected for an offer of service. However, it is currently unknown whether this result conforms to expectations, as the rates of completion throughout the system are not routinely reported and baselines at each of the stages have not been assessed. Setting standards for performance and tracking these over time will enable the impact of changes in the process to be effectively measured.

   c. **There are no standardised methods for identifying candidates with desirable characteristics early in the process.** Applicants[2] with desirable characteristics are not identified early in the process, therefore, it is unknown whether recruitment truly retains the highest quality candidates. Indeed, the merit of each applicant is assessed rigorously, yet many candidates with valuable skills and abilities may drop-out before they reach the point of being adequately assessed.

   d. **The process is lengthy and often involves repetition.** Overall the process takes a long time (median length is 7.5 months) for most candidates. Furthermore, many applicants (33%) were found to have repeated steps during the process. This may introduce unnecessary complexity and result in candidates disengaging from the process.

   e. **Candidates felt that they did not have sufficient information, were not well prepared, and felt disengaged throughout the process.** Overall, candidates were highly motivated, but did not feel that they had sufficient information about the process, were often not well-prepared, and felt disengaged. Better communication with Defence Force staff was seen as a way of overcoming these issues.

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[2] Where the term "desirable characteristics" of candidates is used this refers to qualities seen as attractive by the Defence Force such as merit, skills, and qualifications which make them appropriate to fill critical and strategic roles within the Defence Force, leadership qualities or potential, as well as commitment and motivation to join the military. The specific desirable characteristics of a candidate are not defined in this report because these must be identified by the Defence Force, and may change in line with the future needs of the organisation.

f. **Data are not collected consistently or systematically throughout the recruitment process.** The data collected throughout recruitment lack comparability across candidates as many fields are captured as text. There are inconsistencies in the records of candidates and their outcomes as recorded in the system. There is also missing information for candidates as they move through the process.

2. **Female and ethnic minority candidates drop out of the process in disproportionate numbers.** Smaller numbers of women and ethnic minority candidates apply to join the Defence Force in comparison to men and New Zealand Europeans, and representation of these groups diminishes throughout the recruitment process. Specifically;

   a. **Women withdraw and were stood-down at greater rates than men.** Overall, of those who completed screening, 27% of women withdrew in comparison to 24% of men, and 26% of women were stood-down in comparison to 18% of men. The over-representation of withdrawn and stood-down women directly impacted on the successful completion of these candidates, with 11% of women being selected for an offer of service in comparison to 14% of men.

   b. **Crucial steps of the recruitment process take longer for women than for men.** On average it took women 2 to 4 weeks longer to progress through testing and the interview, which coincided with reductions in their representation throughout the process.

   c. **Ethnic minorities were declined, withdrawn, and stood-down at greater rates than New Zealand Europeans.** Specifically, Maori and other ethnic minorities were declined at greater rates than New Zealand European candidates, although Maori also withdraw at greater rates and other ethnicities were stood-down at greater rates.

   d. **Both female and ethnic minority candidates did less well on testing than males and New Zealand Europeans yet re-tested at lower rates.** Women had lower fitness testing results and lower scores on mathematics than men. Both Maori and other ethnicity candidates scored lower on aptitude tests, but had fewer differences on fitness. Although they were less likely to pass testing, women and other ethnicity candidates re-tested at lower rates than other candidates.

Process implementation recommendations

1. **Minimise the wastage at the first stage of the process by automating and standardising methods of screening out non-eligible candidates.**
2. **Assess performance of the recruitment system against a set of agreed standards and track performance over time.**
3. **Set excellence benchmarks for timing and repetition throughout the stages of recruitment.**
4. **Ensure candidate information needs are being met and implement consistent methods of communication with candidates.**

5. Capture and analyse candidate data consistently and systematically across all stages of recruitment.
6. Implement methods of identifying candidates with desirable characteristics early in the process.

Candidate management recommendations

7. Examine reasons for decline, stand-down, and withdrawal and compare these across candidates.
    7a. Assess why women are more likely to be stood-down, and withdraw in comparison to men.
    7b. Assess why Maori candidates are more likely to be declined and withdraw in comparison to New Zealand Europeans and why other ethnicity candidates are more likely to be declined and stood-down than New Zealand Europeans.
8. Institute consistent follow-up mechanisms for candidates with a focus on stood-down and withdrawn applications.
9. Minimise the discrepancies in timing for all candidates, but with a particular focus on discrepancies in timing for male and female applicants.
10. Support and enable all candidates to be well prepared for testing and encourage candidates with identified desirable characteristics to re-test upon failure of some element of testing.

1. INTRODUCTION

The New Zealand Defence Force aims to have a strong and inclusive workforce that recognises diversity is a strength that contributes to the long-term effectiveness of the organisation.[3] However, similar to many other modern militaries, the Defence Force is not currently representative of the population at large in terms of either gender or ethnicity.

The 2014 Maximising Opportunities for Military Women in the New Zealand Defence Force (Equity Review) report suggested that in order to encourage diversity, the Defence Force should be focusing on recruiting the best personnel from a broader candidate pool. However, this review also found that despite efforts to increase numbers of women applying to join, there were discrepancies in the rates of male and female candidates who made it through the recruitment process. Furthermore, the review focused on the experiences of military women, but did not examine the outcomes for ethnic minorities in the Defence Force.

This report investigates all phases of the recruitment selection process for a diverse group of applicants (i.e., the cohort) from initial application through to attestation (being sworn into service). The broad aims of which were to explore the experience of candidates as they go through recruitment, to investigate which factors assist individuals to successfully complete, to ascertain what causes candidates to withdraw applications, be stood-down, or declined, and to identify any differences between population groups (e.g. women and ethnic minorities).

1.1. Methodology

The research project consisted of the following components:

1. An analysis of the data collected as part of the recruitment process for a cohort of 2597[4] candidates who applied to join the Defence Force during the period from June 2014 – January 2015[5].
2. A detailed analysis of outcomes throughout the process for the 885 cohort applicants who completed initial screening.
3. An analysis of survey data from a sub-sample of the cohort candidates on their personal experiences of the recruitment process[6].

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[3] DFO 3 Version 1.16: Chapter 2: Equity and Diversity (2012)

[4] The cohort represents approximately 50% of all candidates who applied during the time period where candidates could opt into the study.

[5] See appendix 5.1 for full details.

[6] Due to limitations within the survey data collected and small numbers of participants in this sub-sample who made it past the screening process, these data were not analysed in depth as part of this report.

1.2. Context

The recruitment process involves multiple steps that test the eligibility of the candidate to meet the requirements of their preferred service and trade. Defence Force staff (Candidate Coordinators) manage the process for individual applicants within the Prospective Candidate Management System (PCMS).[7]
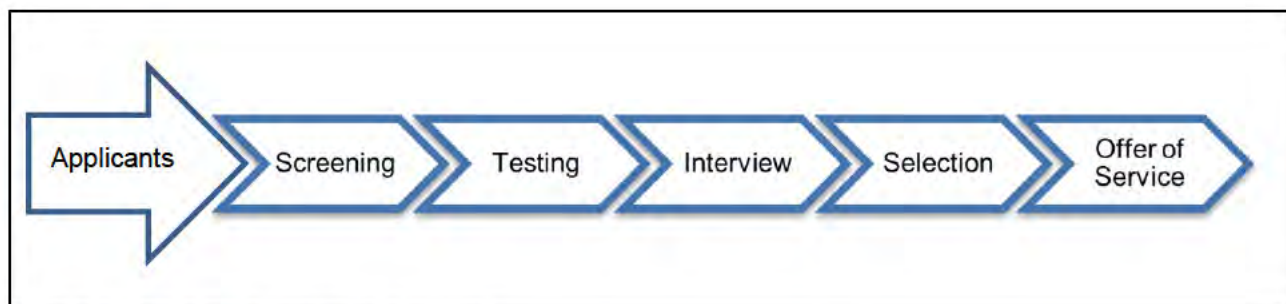

Figure 1 Stages of the recruitment process

The stages of the recruitment process described in this report[8] are as follows:

1. **Screening:** During this stage, all applicants complete an online application which is checked by candidate coordinators to ensure that the individual meets the minimum entry requirements for education, residency, and health in order to proceed through the process.
2. **Testing:** During this stage, candidates who have passed initial screening undergo an Assessment-Day during which they take a series of aptitude and physical tests in order to meet the requirements for their selected service and trade. Upon successful completion of Assessment-Day candidates are eligible to attend an interview.
3. **Interview:** During this stage, candidates sit an interview where they are rated on organisational fitness with respect to their chosen commission, their aptitude for their chosen service and trade, and their academic qualifications. Upon completion of this stage candidates may be recommended for selection review.
4. **Selection:** During this stage, eligible candidates are selected from the pool of those who have been recommended by the interviewers for any trade openings and given an offer of service if they are successful.
5. **Offer of Service:** During this stage selected candidates may have accepted an offer of service, or be in the process of considering an offer of service, with the final outcome of the recruitment process being attestation.

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[7] This system is predominantly used for real-time updates and reporting on where candidates are in the process, and not for examining the whole recruitment process.

[8] These are the most discrete steps of the process, although there are multiple other components that are not depicted in this figure. See www.defencecareers.mil.nz/how-to-join/the-stages-application for an example of how the stages of the process are outlined to candidates.

In order to examine each stage of the recruitment process in detail, the number and mix of candidates who successfully completed each stage of recruitment are reported. However, because only those who were successful at the previous stage were able to move through the subsequent stages, the other outcomes of candidates at each stage of the recruitment process were also examined. Specifically, at the first four stages, screening, testing, interview and selection, candidates were categorised into the following outcomes[9]:

1. **In process:** the candidate's application was under review, pending documentation, or otherwise without a final decision at one of the stages.
2. **Stood-down**: the candidate was put on hold by the Defence Force because they did not currently meet requirements (e.g., residency, health, testing). This "stand-down" period meant that the candidate's application was still active, but without a final decision at one of the stages.
3. **Withdrawn / Closed due to inactivity**: the candidate decided that they no longer wanted to continue with the process or their application was closed because they did not follow-up with their Candidate Coordinator.
4. **Declined**: the Defence Force decided that the candidate did not meet the criteria for the stage and, therefore, initiated a decline decision.
5. **Complete:** the candidate successfully completed the stage and was eligible to move on to the next.

By mapping candidates outcomes (in process, stood-down, withdrawn, declined, and complete) across each of the stages (screening, testing, interview, selection) we can begin to see where the major barriers are within the process, and assess the reasons why candidates do not make it through the process. The following report examines these questions in detail.

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[9] See Appendix 5.2 for more detailed categorisation

2. THE RECRUITMENT PROCESS

In total 2597 individuals who applied to join the Defence Force during the period between June 2014 – January 2015 were included in the cohort. Of this group, 657 (25%) of the candidates were female and 1940 (75%) were male. The majority of applicants were born in New Zealand (71%), and the largest group of candidates identified their ethnicity as New Zealand European (43%), followed by Maori (27%), Pacific Peoples (13%), Asian (10%), other European (4%), and other ethnicities (4%).

Once candidates have applied to join the Defence Force, the first stage of the recruitment process is screening. During this stage all applications are checked by candidate coordinators to ensure that the individual meets the minimum entry requirements for education, residency, and health.

Although the number of applicants in the cohort was large, only 885 candidates were found to progress past screening, representing a loss of 66% of the cohort. At this stage, 30% of those who applied withdrew before they completed screening, 32% were declined as a result of screening, and 4% were either still in process at screening or stood-down.

The large number of individuals declined at this stage indicates that many prospective candidates do not meet the eligibility requirements.[10] Additionally, the large number of individuals who withdraw at this stage indicates that many candidates do not intend to follow through with their applications, and therefore, opt-out early in the process. In general, this suggests that screening is effective in both delivering a decision to non-eligible candidates and retaining motivated, eligible candidates at this stage of the process.

There are, however, differences in completion of screening by gender, with 24% of the successful candidates at the stage being female, and 76% male. Numbers of candidates who completed screening also differed by ethnicity[11], with 52% New Zealand European, 29% Maori, 9% Pacific Islander, 6% Asian, and 2% other European, and 1% other ethnicities groups making it through this stage.

As shown in Figure 2, Maori and Pacific Islanders were the most likely to withdraw at screening. In contrast, New Zealand Europeans and Maori were the least likely to be declined and the most likely to successfully complete. All ethnic minority groups were found to have high likelihoods of being declined at screening.

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[10] A detailed investigation of which requirements were not met was unable to be carried out due to issues with the data.

[11] 118 of the candidates were of unknown ethnicity, and therefore, were not included in any of the analyses examining ethnic groups.
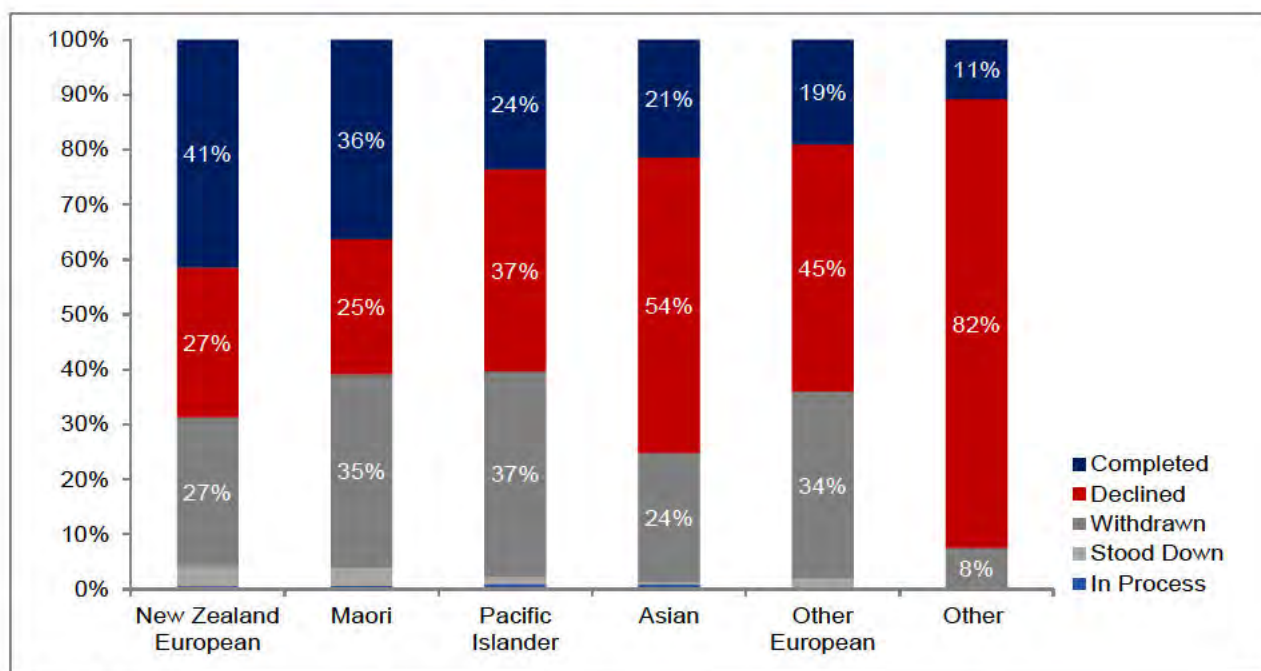
Figure 2 Outcomes at screening by ethnicity

However, following the constraints on security clearance for those who are either not resident in New Zealand, or have resided for long periods of time in other countries, it was found that nearly half of those who did not complete screening were not born in New Zealand (with a large number applying to join from overseas). Therefore, although there are discrepancies in completion of screening by ethnicity, this seems to be a result of issues regarding residential status.

Previous research conducted by Defence Excellence, found that the current screening system absorbed a lot of Defence Force resource, often needing re-work by staff, and potentially introducing error into the processing of candidates. Similar issues were found in the current study; with candidate data not being collected in a consistent way, information captured as free-text, and inconsistencies emerging in the records of candidates. Effectively, due to the lack of comparability in the information collected from each candidate, it was not possible to fully analyse where candidates failed to meet minimum entry requirements or why.

The screening process effectively filters out individuals who are not eligible to join the Defence Force[12] although currently this is resource intensive and hampers the ability to effectively measure candidate outcomes.

Recommendation 1. Minimise the wastage at the first stage of the process by automating and standardising methods of screening out non-eligible candidates.

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[12] Although the accounts of candidates indicate that the initial health check may be problematic in that it screens out some applicants who are, in fact, eligible to join the Defence Force.

2.1. Drop-off and loss throughout recruitment

Of those who completed screening one third did not pass the testing stage, and two-thirds did not pass the interview stage (see Figure 3). This resulted in 13% of those who had completed screening being attested at follow-up, which corresponds to 5% of the overall cohort.
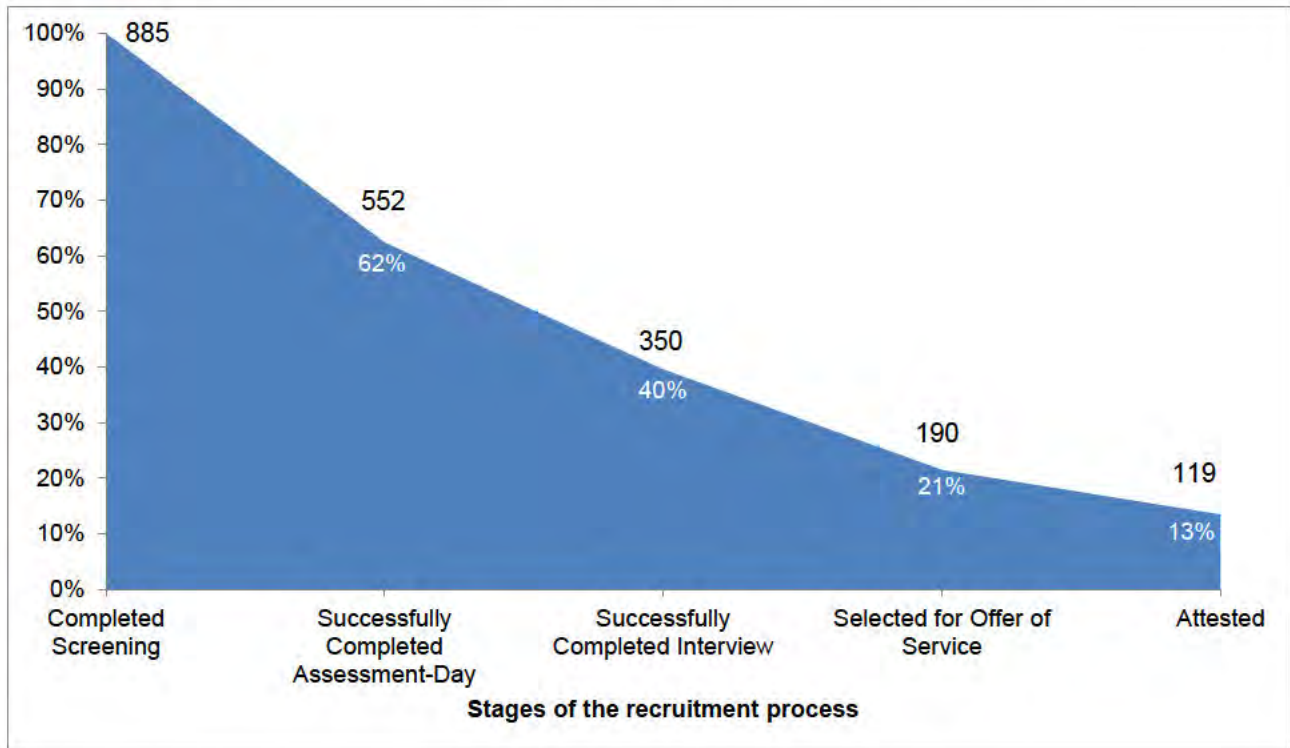
Figure 3 Percentages of candidates who completed at each stage

Figure 3 illustrates the number of those who completed screening to make it through the process. Although the number of successful candidates seems small, it is currently unknown whether this result is in line with anticipated numbers of completions. This is because the ratio of those who successfully complete by those who apply to join is not routinely reported and baselines at each of the stages have not been assessed. Setting standards for performance and tracking these over time will enable the Defence Force to ensure that they are fulfilling recruitment targets, to identify where there are risks in the system not delivering the required number of recruits, and to effectively measure the impact of any changes made to the process.

Furthermore, while the results of testing and the interview rely on the ability and skills of the candidate, the number of candidates selected for an offer of service is a direct reflection of the number of positions open within the Defence Force during the time of the cohort[13]. Therefore, numbers selected for an offer of service are not indicative of the quality of the candidates, but rather a reflection of organisational constraints.

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[13] Number of roles open are not set within the recruiting environment, but rather by the wider Defence Force.

It would be expected that the numbers of candidates who progress through the stages of recruitment reduces as the process attempts to identify the best candidates for the roles available. However, it is unknown whether the numbers who make it through recruitment are optimal, or whether it should be expected that greater proportions of applicants complete overall.

> *Recommendation 2.* Assess performance of the recruitment system against a set of agreed standards and track performance over time.

2.2. Candidate outcomes at each stage of recruitment

The following section examines the outcomes of applicants within each stage of the process in order to see what the major barriers were for candidates and where these happened in the process. As shown in Figure 4, at the testing, selection and offer of service stages the most common outcome was that the candidate remained without a final decision (in process and stood-down) followed by withdrawal, and the least likely outcome was being declined by the Defence Force. Aside from screening, the only exception to this was the interview stage where the most common outcome aside from successful completion was withdrawal.
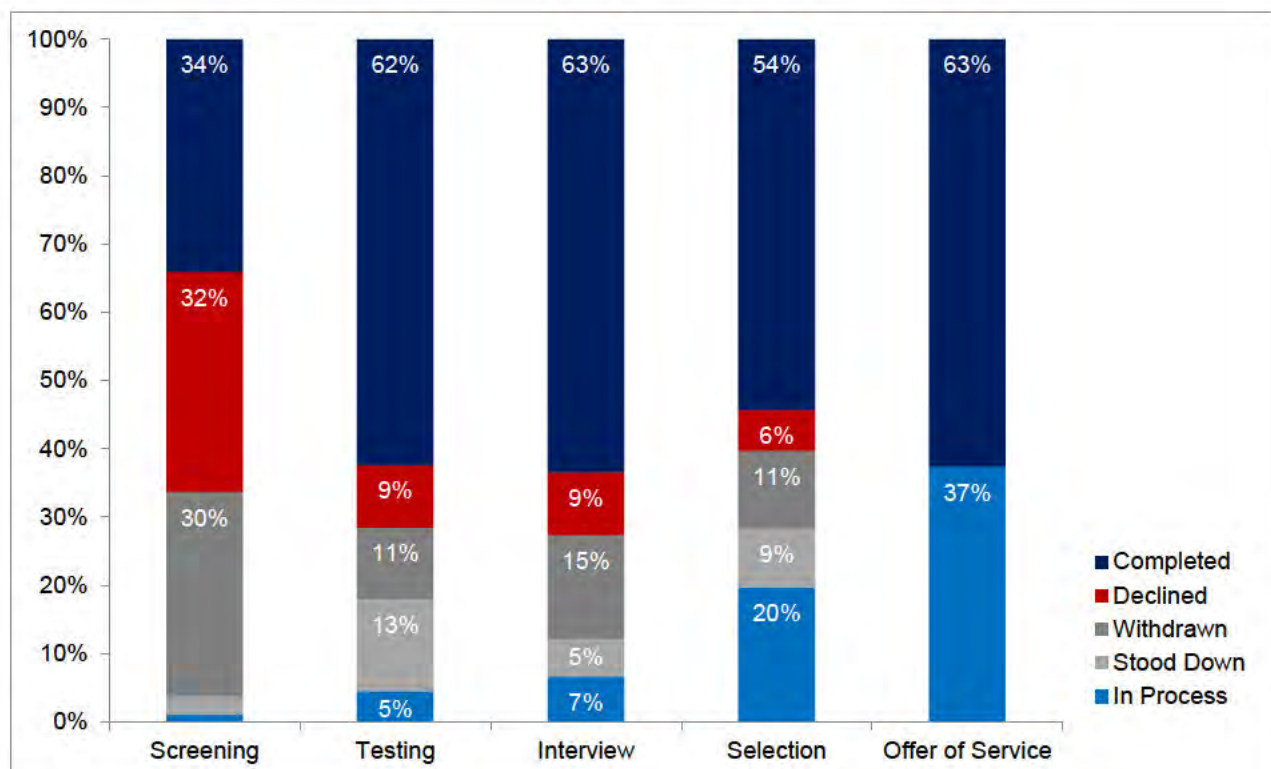
Figure 4 Outcomes across all stages of recruitment

The increase in numbers of individuals who did not have a decision across the stages of the process is partly due to the fact that some of the cohort will not have progressed through to the system due to the length of the process (detailed in the next section). This is particularly true at the Offer of Service stage where the Defence Force had made candidates offers, but many had not yet accepted, or had accepted and not yet attested (but will so in the short-term future).

2.3. The length and complexity of the process

Overall, the recruitment process was complex to navigate and took a long time for candidates to move through. As illustrated by Figure 5, the median time from application under review to attestation was 29.4 weeks (7.5 months), and this ranged from 6 weeks to over a year for those who completed the process.
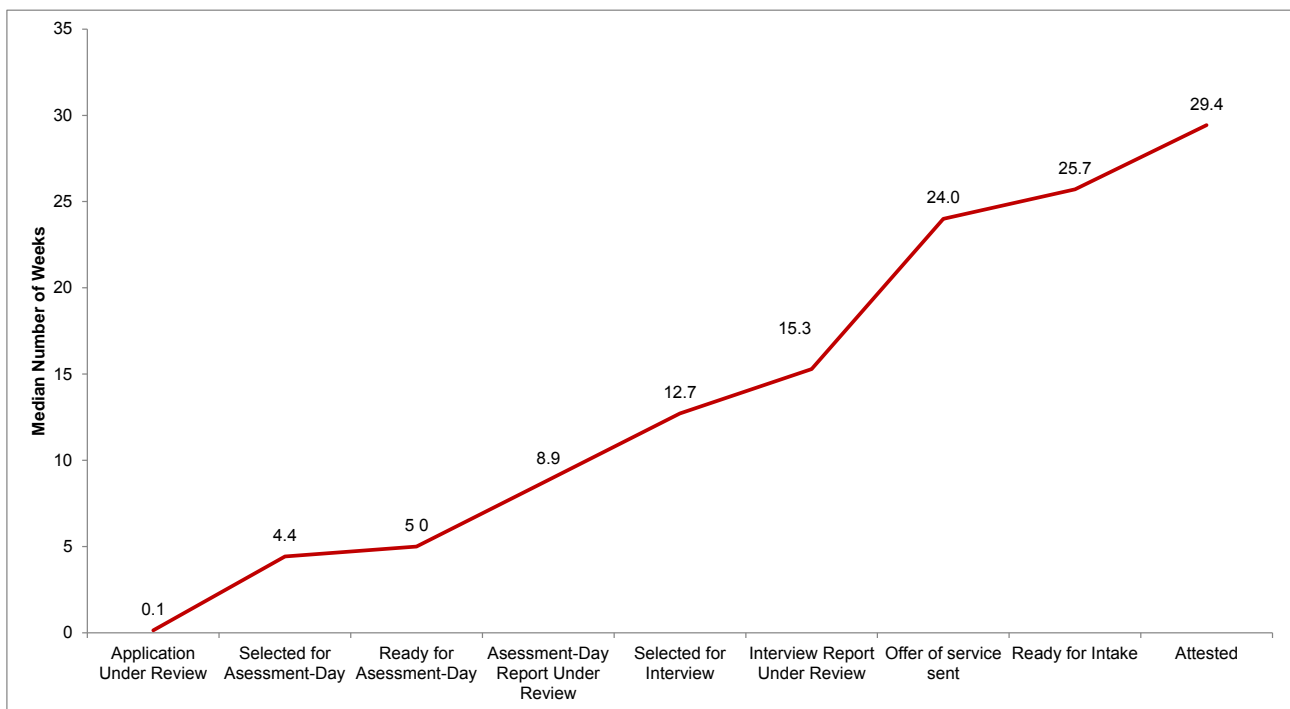

Figure 5 Median length of time in weeks through the steps of the process

It was also found that one-third (33%) of the applicants had repeated steps[14] of the recruitment process. This result may be due to error in the recording of candidate information, but may also indicate problems in the implementation of the process, or be a result of candidates themselves rescheduling assessment phases. For example, repeated steps may show that candidates are re-opening their applications after being declined, withdrawn, or stood-down, that candidates are rescheduling their tests or interviews after missing or declining dates offered by the Defence Force, or that candidates are attempting components of assessment multiple times after failing.

A large amount of the repetition was found to occur at testing, both with the scheduling of tests and in re-testing after failed attempts. Specifically, for individuals who had repeatedly been "selected for assessment" and "ready for assessment"[15], fewer were found to go on to an interview than those who did not repeat this step. However, for the candidates who had attended multiple Assessment-Days (20%), greater numbers of individuals were found to go on to attend an interview.

These results indicate that rescheduling tests multiple times can be a deterrent to completion (fostering unnecessary complexity and additional time taken through the process), or alternatively, can be an indication that the candidate is not serious about their application. In contrast, when candidates repeat testing after failing one or more test, this is a strong indicator of future success in the process. However, the large amount of repetition of testing also suggests that candidates may not be sufficiently prepared for this stage.

Although there are currently time lines[16] presented to candidates for each stage of the process, the average length of time taken in the cohort exceeds this in many places. In fact, a large number of candidates took much longer than the averages presented in Figure 5. Furthermore, there are currently no methods with which to measure and reduce unnecessary repetition of steps. Excellence benchmarks, which define the proportion of candidates to proceed through each stage in a given time frame and the degree of acceptable repetition, would assist in defining whether the process is meeting best practice.

> *Recommendation 3.* Set excellence benchmarks for timing and repetition throughout the stages of recruitment.

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[14] Steps refer to the detailed candidate status level as illustrated on the horizontal axis of Figure 7. These are sub-components of the broader level stages of recruitment (screening, testing, interview, selection, attestation). Please note duplicate steps which occurred on the same day were removed from the analysis.

[15] These two steps occur before testing in the scheduling phase.

[16] See www.defencecareers.mil.nz/how-to-join/the-stages-of-application.

2.4. Candidate experience

Applicants stated that they were moderately to very motivated to apply to the Defence Force, and tended to be motivated more by internal factors (personal desire to do so) rather than external factors (the rewards or recognition they would receive by applying).

Yet the length and complexity of the process seemed to have a number of spill-over effects for candidate outcomes, and may contribute to applicants dropping out of the process.

Candidates indicated that the three most important components of the recruitment process to be improved were; a quicker decision being made about the applications, more engagement with uniformed recruiters, and better contact with candidate coordinators.

Overall two themes came through strongly from the candidate experience: 1) the need for better and clearer communication with Defence Force staff, and 2) the need for more information on all aspects of the recruitment process.

Candidates indicated that they felt unprepared due to not receiving sufficient information, and that they needed greater levels of assistance in preparing for the stages of recruitment. These issues resulted in delays during the process and led to applicants feeling disengaged.

Furthermore, a large number of applicants self-reported that they did not know why they had been declined, and would like further clarification. The accounts of these candidates indicate that there is a lack of communication regarding eligibility requirements and inadequate feedback following being declined. Specifically, a reoccurring theme was the lack of clarity and flexibility around medical conditions.

However, the majority (67%) of candidates who were unsuccessful or who withdrew said that they would like to reapply for a either a civilian position or a role in the Defence Force. The fact that many applicants still desire to join the Defence Force even after dropping out of the process is an important indicator that additional engagement could capture some of these candidates. In fact, candidates who reported

"There was lack of interpersonal-relations with Defence Force staff. I did not have all my required certificates and the attendant did not seem to care nor be interested in helping me. That was disappointing" New Zealand European male (declined)

"My case manager seemed cold and unconcerned. Also, it took her an awfully long time to make contact other than through email." Maori female (in process)

"I was accepted for the army and given an offer of service which I signed. Then I was declined as I was temporarily unfit due to asthma history (even though I passed the asthma test)... I understand there are medical requirements to become a soldier however being offered a position and then having that withdrawn was disappointing. I attempted to appeal the decision and after a few emails and phonecalls, heard no response." Maori female (declined)

that they felt engaged and wanted by the Defence Force were less likely to be declined and less likely to withdraw their applications than those who did not feel wanted. This result indicates that quality interactions and engagement with the Defence Force has important implications for whether the candidate is successful in being selected for an offer of service.

In order to retain candidates with desirable characteristics, to set accurate expectations of the process and the role(s), and to encourage a sense of belonging to the organisation it is suggested that the Defence Force assess candidate information needs throughout recruitment and develop consistent methods of communication in order to foster accurate expectations and reduce ambiguity at all stages of the process.

> *"I didn't feel wanted because the process didn't feel personalised to me as a recent law graduate. People were unable to give me advice on roles suitable to me."* Maori female (withdrawn)

> *"Very little contact. 2 emails to be exact... I had been told the NZDF was looking for men like myself. When I contacted them, it seemed they did not."* Maori male (withdrawn)

Recommendation 4. Ensure candidate information needs are being met and implement consistent methods of communication with candidates.

2.5. Tracking and managing candidates

As found in the previous sections, the recruitment process is complex, involving a series of discrete stages that candidates must go through in order to join the military. Overall, during this process candidate information is not captured in a way that allows for easy tracking and management of individuals throughout these stages. The inability to effectively compare and track candidates results in a greater propensity for applicants to get lost in the system, and creates difficulties in developing effective candidate management practices.

The stages themselves are both logical and sound in that they seek to assess and retain candidates who have high levels of fitness, are well educated, and align with the values of the Defence Force. However, the data collected by the Prospective Candidate Management System were not designed to benchmark progress through the system nor to track the outcomes of all applicants. Indeed, the system was designed for simple reporting on candidates, which it currently does well. Yet there are also a number of issues which hinder effective candidate management and the tracking of applicants throughout the system.

Specifically, the data collected currently lack comparability across candidates as many fields are captured as text, there are inconsistencies in the records of candidates and their outcomes as recorded in the system, and there is missing information for candidates as they move through the

process. Effectively, due to the current ways of collecting data on candidates it was not possible to fully assess why applicants were declined, withdrawn, or stood-down or whether decisions about individuals were made in similar ways.

Additionally, there are no standardised methods for identifying candidates with desirable characteristics early in the process. Therefore, it is unknown whether the recruitment process truly retains the highest quality candidates. Indeed, the merit of each applicant is assessed rigorously throughout recruitment, yet many candidates with valuable skills and abilities may drop-out before they reach the point of being adequately assessed. Identification of the quality of candidates at the outset of the recruitment process and the implementation of effective case management of these candidates may increase both engagement and quality of the final recruit pool.

Recommendation 5. Capture and analyse candidate data consistently and systematically across all stages of recruitment.

Recommendation 6. Implement methods of identifying candidates with desirable characteristics early in the process.

3. CHALLENGES FOR WOMEN IN RECRUITMENT

At present, women make up 51% of the total New Zealand population, but in 2015 women only made up 16% of the Regular Forces. Findings of the 2014 Maximising Opportunities for Military Women in the Defence Force[17] report indicate that some of the major difficulties for achieving gender representation occur before candidates are even sworn in. Specifically, the aforementioned report found that while approximately 21% of the Defence Force applicants are female, men were found to have around a 50% higher probability of making it through to attestation.

Similar to findings from the Maximising Opportunities for Military Women in the Defence Force report, at each stage of the recruitment process the male cohort candidates had a greater likelihood of successful completion than the female candidates. In fact, of those who had completed screening, men were found to have a 35% higher probability of making it through to attestation. The gender differences first emerge during screening where 35% of female candidates withdraw in comparison to 28% of male candidates. The differences carry on even past initial screening as illustrated in Figure 6, where there are discrepancies in the rates of completion throughout the process which are most apparent at testing and the interview.
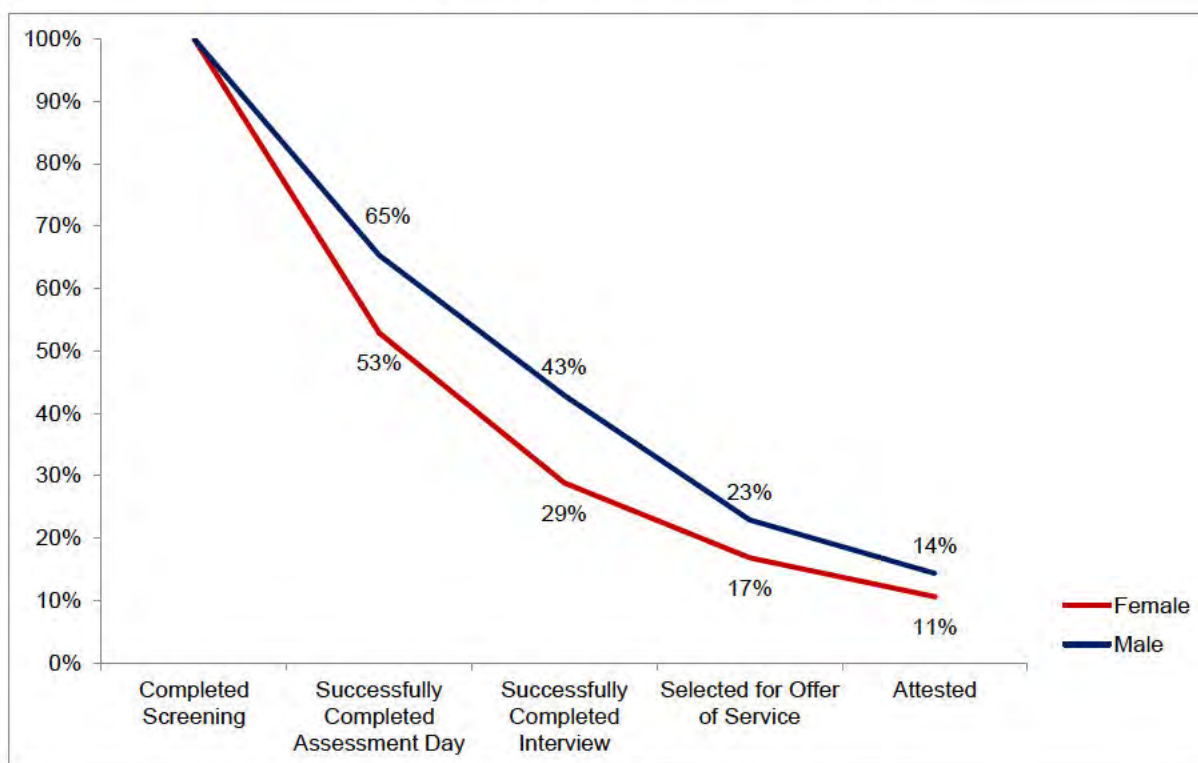
Figure 6 Percentage of candidates complete at each stage by gender

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[17] Ministry of Defence (2014) Maximising opportunities for military women.
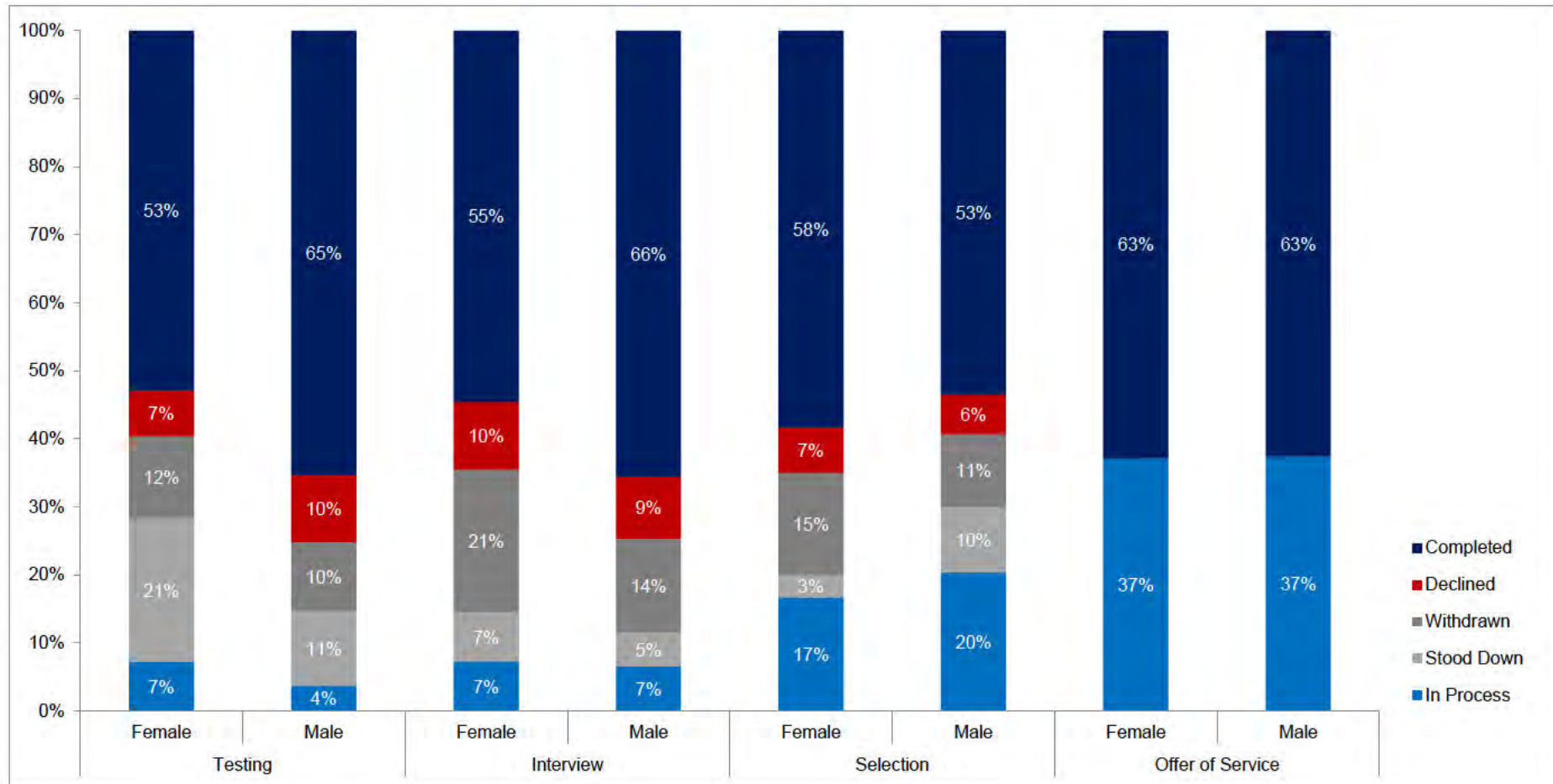
Figure 7 Percentage of outcomes at each stage by gender

When mapping the outcomes of candidates across all stages of the process (see Figure 7) it was found that the most problematic stages of recruitment for women are the testing and the interview stages. Notably, more women than men are stood-down at testing and withdraw at the interview. The following section investigates testing and interview scores in order to develop a more in-depth picture of why female candidates were less likely to complete these stages.

3.1. Testing and interview scores

Analyses of the average testing scores[18] indicate that women do less well than men on some of the core tests. As Figure 8 illustrates, women scored lower than men on the mathematics test, but did not score differently on either the reasoning or verbal tests. Female candidates also scored lower than males on all of the fitness tests[19].

These differences in average results at testing may account for the large number of women who were stood-down at this stage, as any failure of an aptitude test requires an immediate stand-down of 6 months (or a reassessment of trade preferences), and failure of the physical test requires a stand-down period up to the discretion of the Defence Force[20].
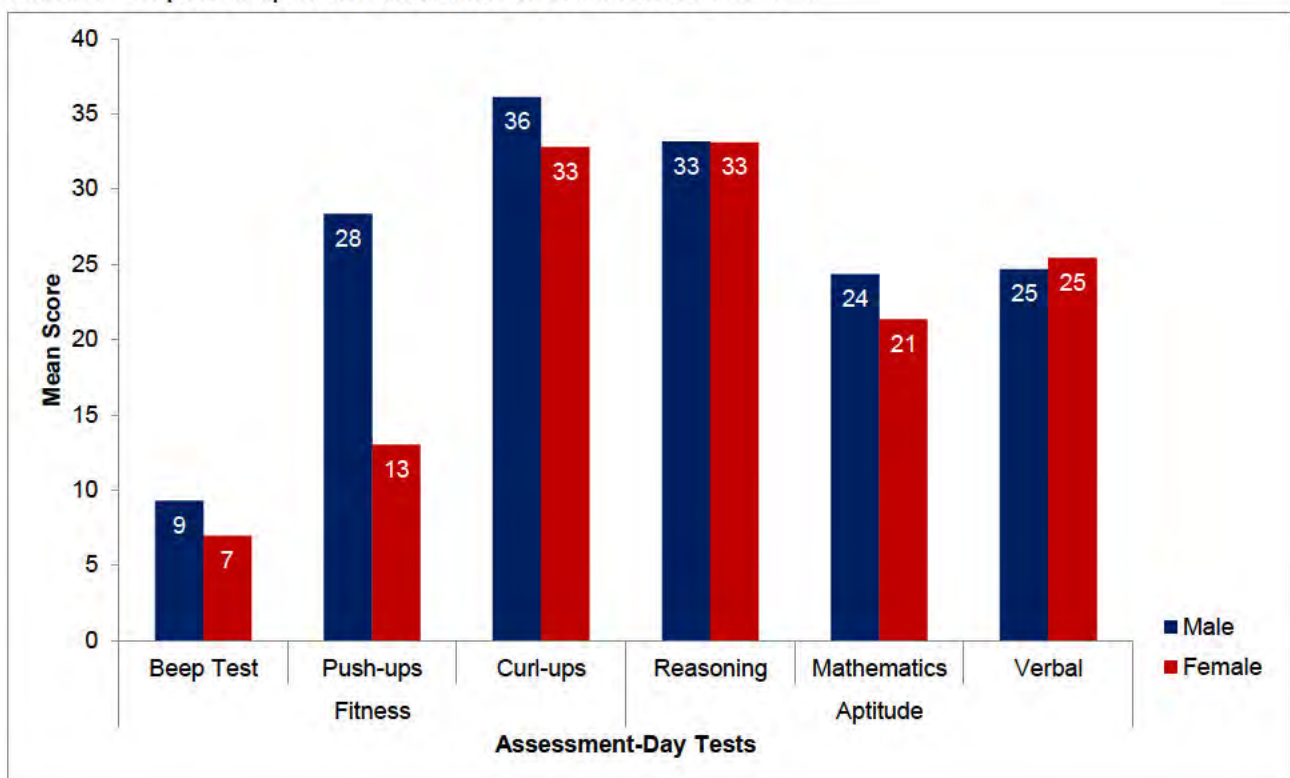

Figure 8 Testing scores by gender

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[18] In total, 716 of the cohort participants attended an Assessment-Day at least once, (555 men and 161 women). Because the testing criteria are trade and service specific, not all tests can be compared across candidates and it cannot be ascertained whether candidates passed or failed on the basis of aptitude or fitness. Therefore, for the purposes of this study, three of the most common aptitude tests (reasoning, verbal, and mathematics) as well as scores on the multi-stage fitness test were compared.

[19] Although the difference on the curl-ups scores was not statistically significant.

[20] It must be noted that these differences are not necessarily because women are not as good as men on any of these tests, but may be because they face challenges in the testing environment by virtue of being a minority. See issues of stereotype threat, e.g., Walton, G. M., Murphy, M.C. & Ryan, A. M. (2015). Stereotype threat in organizations: Implications for equity and performance. *The Annual Review of Organizational Psychology and Organizational Behaviour. 2,* 523 – 550.

Although women's test scores were lower than men (indicating they were less likely to pass testing), they were found to have re-tested fewer times than men (14% in comparison to 22%). As mentioned in the previous section, repeating testing after failure is an important factor in promoting success through the recruitment process. It is currently unknown why female candidates re-test at lower rates than males, although this is an important place where candidates could be encouraged to complete.

Regarding the interview, results indicate that the women who make it to the interview tend to be highly qualified candidates, which may account for why they make it through selection at greater rates than men. Specifically, women scored higher than men on their academic rating (6.2 in comparison to 5.5 out of 10) and on overall organisational fitness[21] (22.2 in comparison to 19.8 out of 25).

Yet, it is currently unknown why female candidates withdraw during the interview stage at greater rates than men. Information from the candidate experience sheds some light on this, showing that for a group of candidates[22] who had withdrawn, the highest rated reason was because they had other opportunities, and that they were worried about how to manage work/life balance. Some of these factors could potentially be mitigated by making sure that candidates are engaged through regular contact, well-informed, and move quickly through the process.

3.2. Representation and timing

While females made up 24% of all candidates who are eligible to proceed past screening, they only made up 18% of those who eventually attest. This means that proportionally less women than men successfully complete the recruitment process. Because women already start out as a much smaller group of candidates than men, this loss leads to very few women making it through recruitment to become attested Defence Force staff.

This is best illustrated by reductions in the proportion of women who completed screening compared to the proportion who had received an offer of service. As shown in Figure 9, women make up 25% of the overall applicants, and 24% of the candidates who complete screening. This reduced down to 22% of those who completed testing, and again to 17% of those who successfully completed the interview. However, at selection representation of women increased slightly to 18%.

Women were also found, on average, to take between a week to a month longer[23] than men to make it through testing and the interview.

[21] During the interview candidates are rated on a range of factors related to organisation fitness such as teamwork, integrity, skills etc.

[22] Sub-sample of 100 who self-identified as having withdrawn from the process and who completed the survey.

[23] Even after controlling for those who were stood-down this difference persisted. Yet, those who re-tested took longer than those who did not.
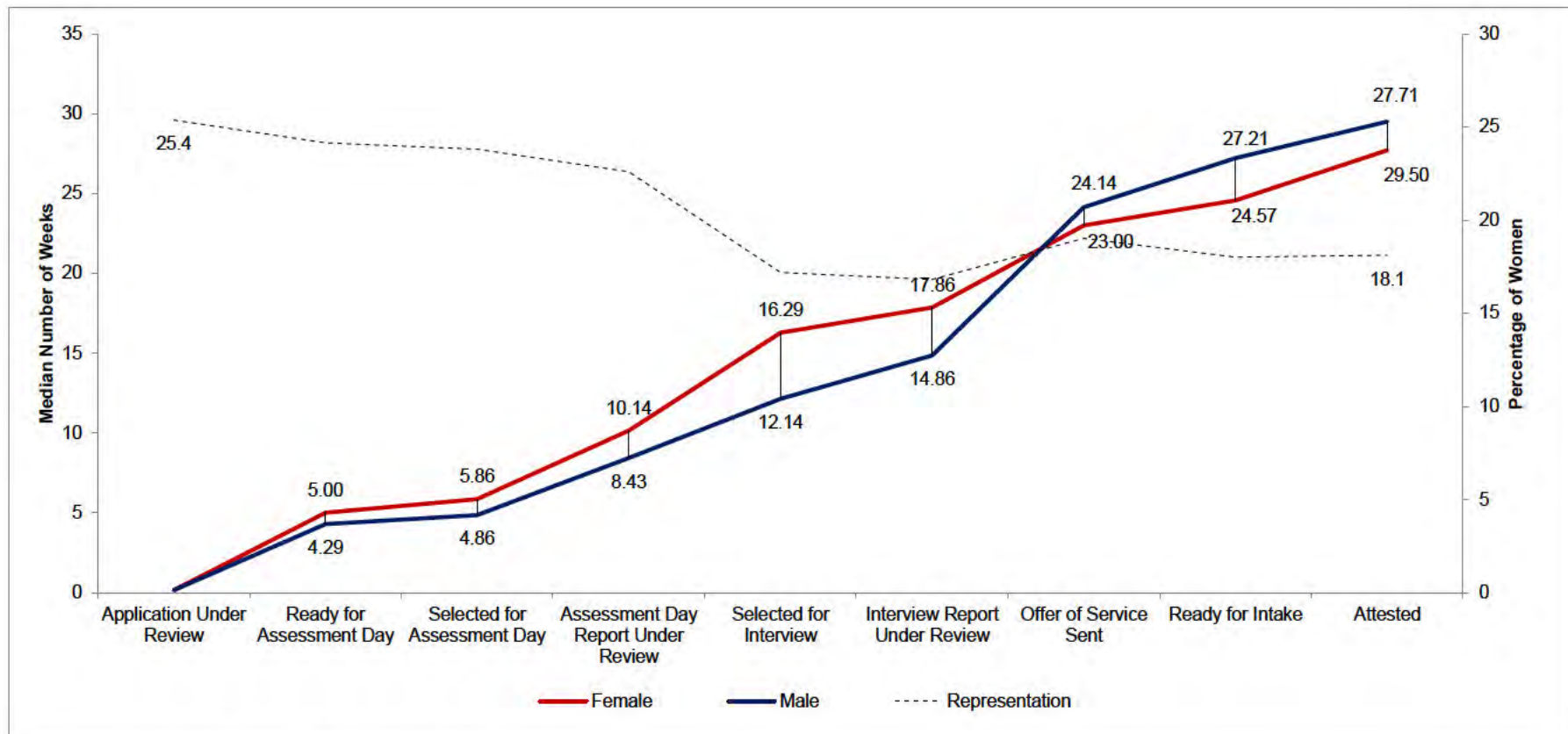
Figure 9 Timing through the recruitment process by gender

Even though women initially went through the process slower than men, after an offer of service they go through the process faster and attest in similar timeframes. Testing and the interview take the longest time for women (as illustrated in Figure 9). Currently it is unknown why women progress through testing and the interview at a slower rate. This effect may indicate real differences in the processing of women and men that can be targeted and managed by Defence, it could be an artefact of the types of trades that women apply for (and the timing of the intakes for these trades), or it could be because of the small numbers of women in the latter stages of the process. Additional investigation of timing differences is needed to elucidate these findings.

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3.3. Outcomes at follow-up by gender

Overall, of those who completed screening, women were more likely to withdraw (27% vs 24%) and be stood-down (26% vs 18%), and less likely to be declined (14% vs 18%) or selected (11% vs 14%) than men.

These findings show that a large number of female applicants who meet minimum entry requirements are not being selected for an offer of service. However, this is not because they are being declined in greater rates than men, but rather because they are withdrawing and being stood-down.

Specifically, there are two stages where these outcomes are more likely for women: at testing where women are stood-down at greater rates than men and at the interview stage where women withdraw at greater rates than men, meaning that they do not get through to the selection board where it is likely they would be getting selected in comparative levels to men.

Recommendation 7a. Assess why women are more likely to be stood-down, and withdraw in comparison to men.

Recommendation 8. Institute consistent follow-up mechanisms for candidates with a focus on stood-down and withdrawn applications.

Recommendation 9. Minimise the discrepancies in timing for all candidates, but with a particular focus on discrepancies in timing for male and female applicants.

Recommendation 10. Support and enable all candidates to be well prepared for testing and encourage candidates with identified desirable characteristics to re-test upon failure of some element of testing

4. CHALLENGES FOR ETHNIC MINORITIES IN RECRUITMENT

At present, the Defence Force has a similar mix of ethnic groups as the New Zealand Police[24], although the Defence Force is closer to population level representation of Maori than the Police[25] (see Figure 10). Despite the fact that Pacific Islander and Asian ethnic groups are the fastest growing ethnic groups in New Zealand, they only make up 2% of Regular Forces and 2% of the New Zealand Police, [26] which is well under population levels.
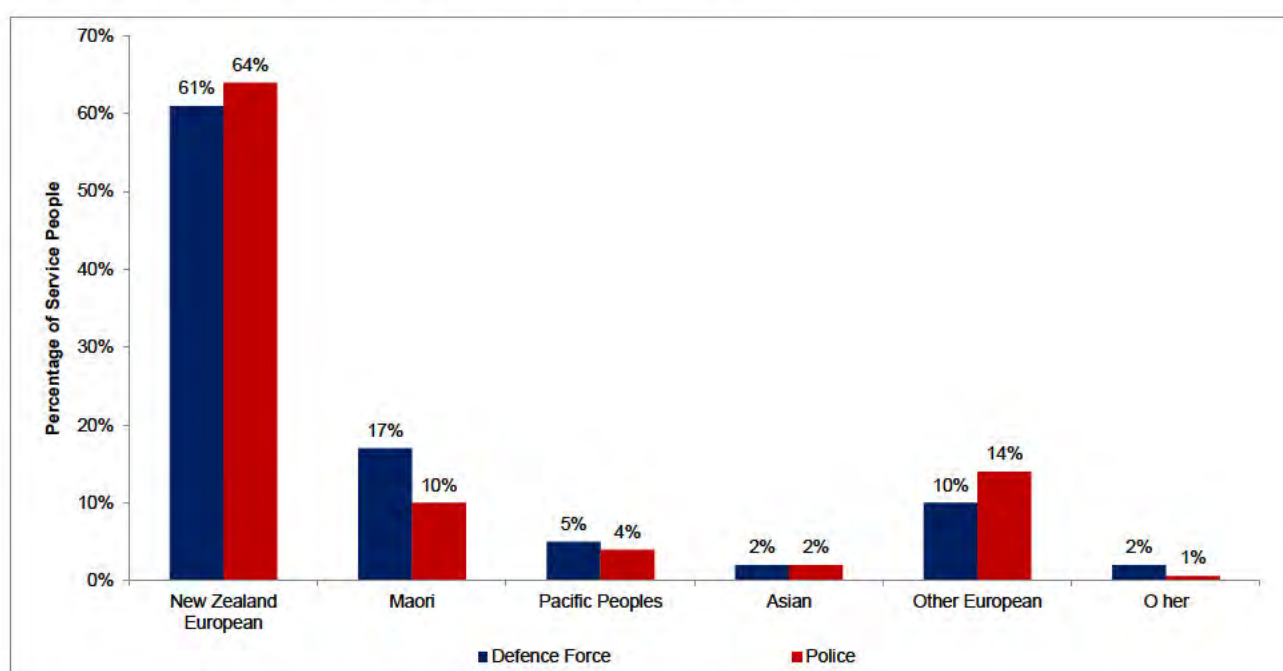
Figure 10 Ethnic groups in the Defence Force and the New Zealand Police

Similar to findings for gender, at each stage of the recruitment process New Zealand European candidates had the greatest likelihood of successful completion followed by Maori and then other ethnicity candidates. As previously mentioned, these differences first emerge during screening (see Figure 2) although this seems to be a result of security and residency eligibility requirements.

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[24] Prior to 2014 ethnicity data was not routinely collected by the Defence Force.

[25] The 2013 ethnicity data could not be directly compared to the Defence Force or Police data collections as more than one ethnicity could be selected, whereas the Defence Force and Police report on preferred ethnicity for individuals who select more than one group.

[26] The Defence Force New Zealand European/Pakeha category includes personnel that indicated their ethnicity was "New Zealander", "New Zealand European" or "Pakeha", and multiple ethnicities were prioritised in the following order; Maori, Pacific Peoples, Asian, other European, and other in accordance with Statistics New Zealand practices.
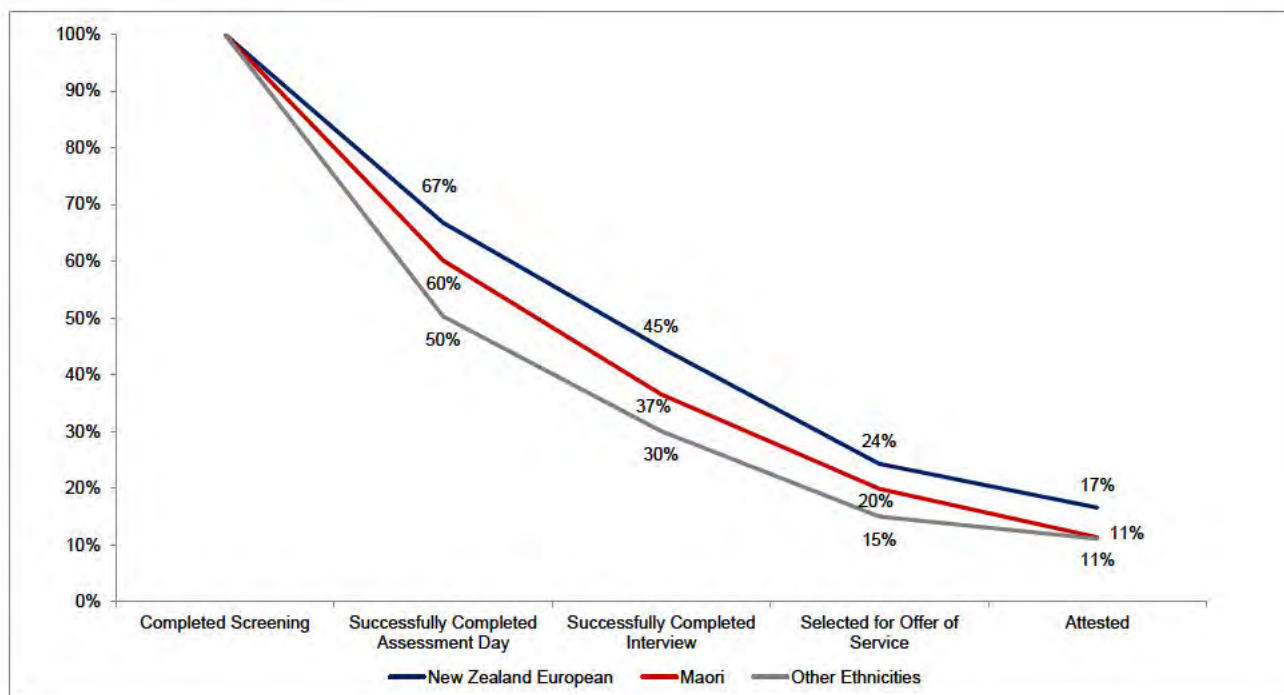
Figure 11 Percentage of candidates who completed each stage by ethnicity

However, differences carry on even past initial screening as illustrated in Figure11, where there are discrepancies in the rates of completion throughout each stage of the process.

When mapping the outcomes of candidates across all stages of the process (see Figure 12) it was found that the most problematic stages of recruitment for Maori seem to be very similar to those for women. Specifically, Maori are less likely to complete the testing stage and the interview stage in comparison to New Zealand European candidates. Notably, more Maori than New Zealand European were declined and stood-down at testing, more withdrew at the interview, and more were in process at selection.

At testing, similar numbers of other ethnicity candidates were declined as Maori, although they evidenced the highest proportion of stood-down candidates. At the interview a similar number of other ethnicity candidates in comparison to Maori withdrew, whereas during selection greater numbers were declined than both Maori and New Zealand European. It must be noted, however, the numbers of Maori and other ethnicity candidates were low in latter stages of the recruitment process and even very small numbers of individuals who were declined, stood-down, or withdrawn during these stages had a large impact on the relative percentages.

The following section investigates testing and interview scores in order to develop a more in-depth picture of why ethnic minority candidates were less likely to complete these stages.
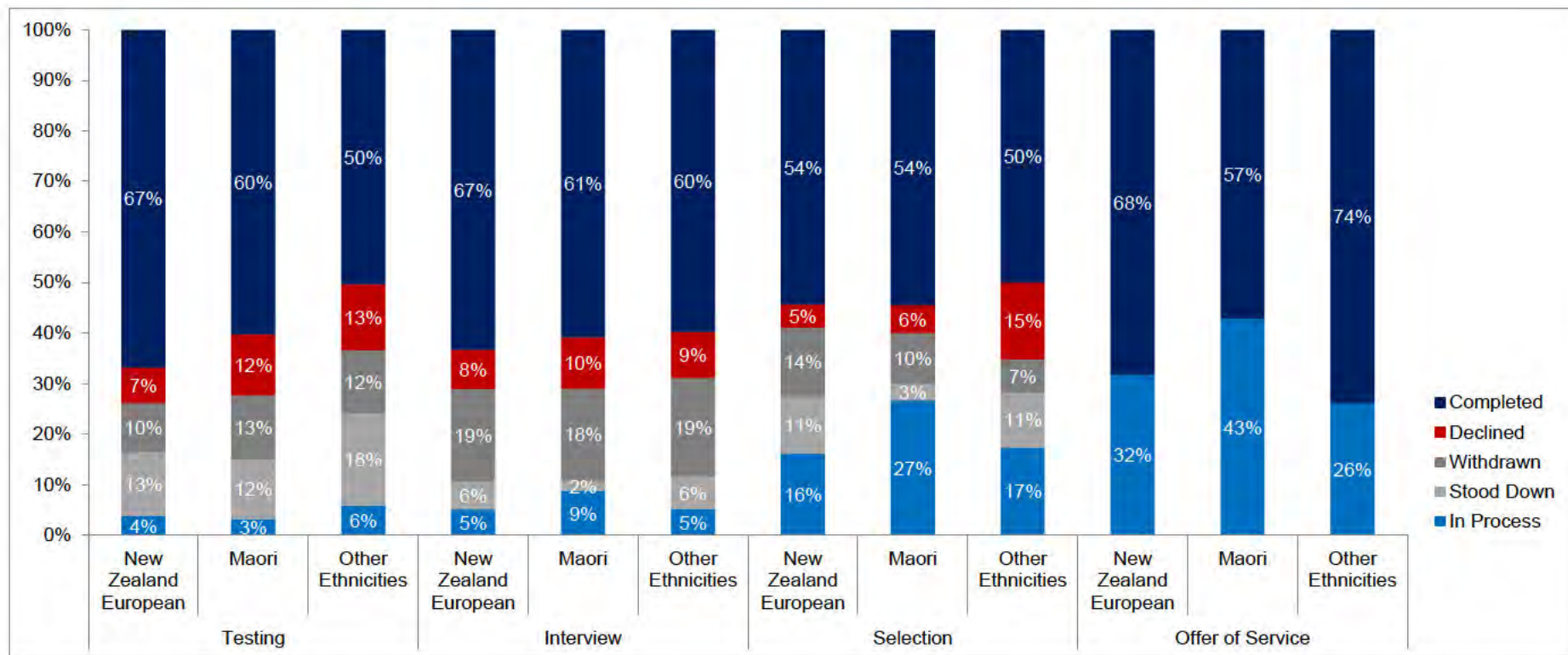
Figure 12 Percentage of outcomes at each stage by ethnicity

4.1. Testing and interview scores

Analyses on testing scores[27] indicate that, in general, New Zealand Europeans performed better than other ethnic groups at the testing stage. As shown in Figure 13 New Zealand European candidates' scores were higher on average than both Maori and other ethnic group applicants on all aptitude tests. However, Maori and other ethnicity candidates did not differ in terms of their average scores on any of the aptitude tests.

Regarding the fitness tests, New Zealand Europeans scored higher than other ethnic minority candidates on the beep test, although average scores of Maori on the beep test did not differ from either New Zealand Europeans or other ethnicity candidates. Furthermore, the groups did not differ on either of the other two fitness tests (push-ups and curl-ups).

Similar to the findings for gender, the differences in aptitude scores may account for the large number of other ethnic minorities who are stood-down at testing. However, the lower testing scores do not explain why greater numbers of both Maori and other ethnicity candidates are declined at testing in comparison with New Zealand Europeans. Indeed, in the data collected as part of the recruitment process it was very difficult to compare the reasons why candidates had been declined at any stage of the process. As this seems to be an important detractor of completion for both Maori and other ethnicity candidates, reasons for decline at testing should be investigated.
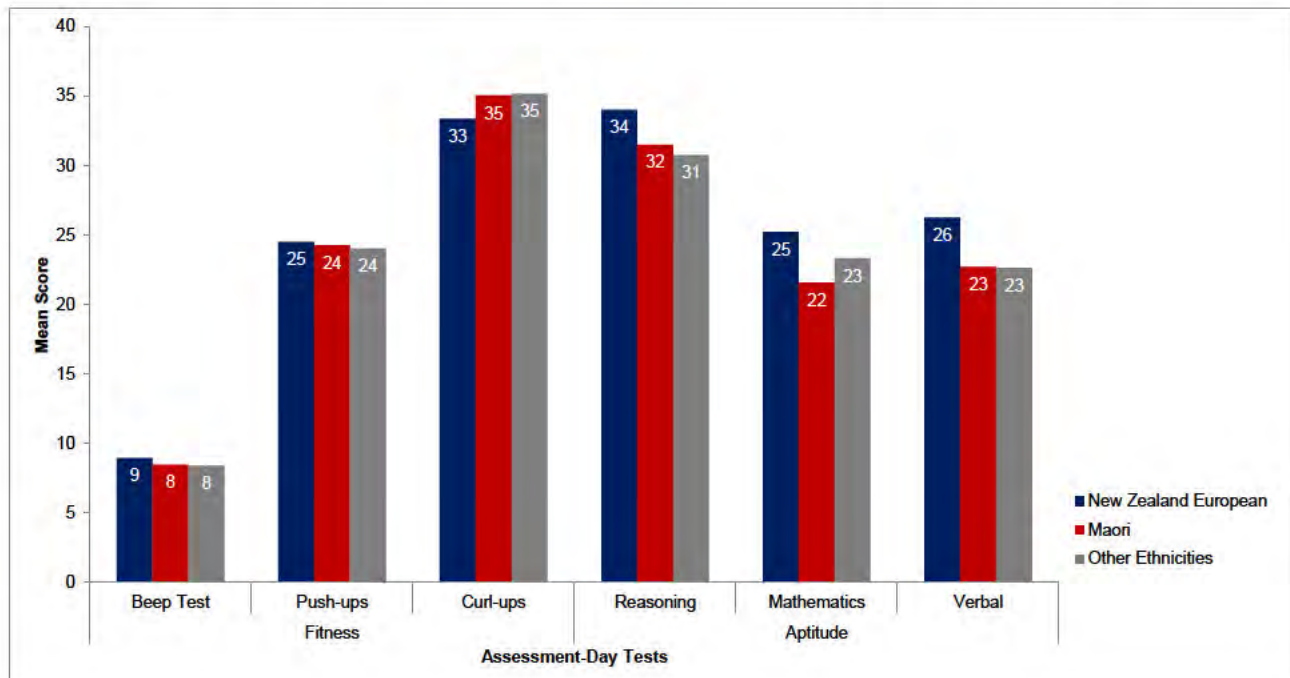

Figure 13 Assessment-Day scores by ethnicity

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[27] Of the participants who attended an Assessment-Day at least once, 697 provided information about ethnicity (374 New Zealand European, 199 Maori, and 124 other ethnic minorities). Where differences are noted these are statistically significant.

Although other ethnicity candidates test scores were lower than New Zealand Europeans (indicating they were less likely to pass testing), they were found to have re-tested fewer times than New Zealand Europeans (15% in comparison to 23%). Maori candidates, however, were found to be just as likely as New Zealand European candidates to re-test (23%). As mentioned in the previous section, repeating testing after failure is an important factor in promoting success through the recruitment process. Yet it is currently unknown why particular groups of candidates re-test at lower rates than others, although this is an important stage at which candidates with desired characteristics could be encouraged to complete.

Regarding the interview analyses, it was found that the ethnic groups did not differ from one another on organisational fitness or academic scores. These results indicate that once candidates proceed to the interview stage they tend to be similarly qualified.

Similar to the gender findings, Maori and other ethnicity candidates withdraw during the interview stage at greater rates than New Zealand Europeans, yet it is not clear why this is the case. It is also unknown why Maori candidates were in process at selection in greater rates, and other ethnicity candidates were declined at selection in greater rates than the other groups. It must be noted, however, that because the numbers of Maori and other ethnicity candidates were very low at the latter stages of recruitment, even small numbers of withdrawn, stood-down, or declined candidates can have a relatively large impact on the percentage of those who complete this stage.

4.2. Representation and timing

Of all candidates who were eligible to proceed past screening New Zealand Europeans made up 52%, Maori made up 29%, and other ethnicity candidates made up 18%. Yet, New Zealand European candidates made up 60% of those who are selected for an offer of service in comparison to 27% of Maori and 13% of other ethnicity candidates. This means that proportionally fewer non-New Zealand European candidates completed the recruitment process in comparison to New Zealand European candidates.

Specifically, the representation of Maori decreased from 29% to 27% at the interview stage. For other ethnicity candidates, however, decreases in proportional representation occurred mainly at testing, with representation reducing from 18% to 15% and again to 13% of those selected for an offer of service.
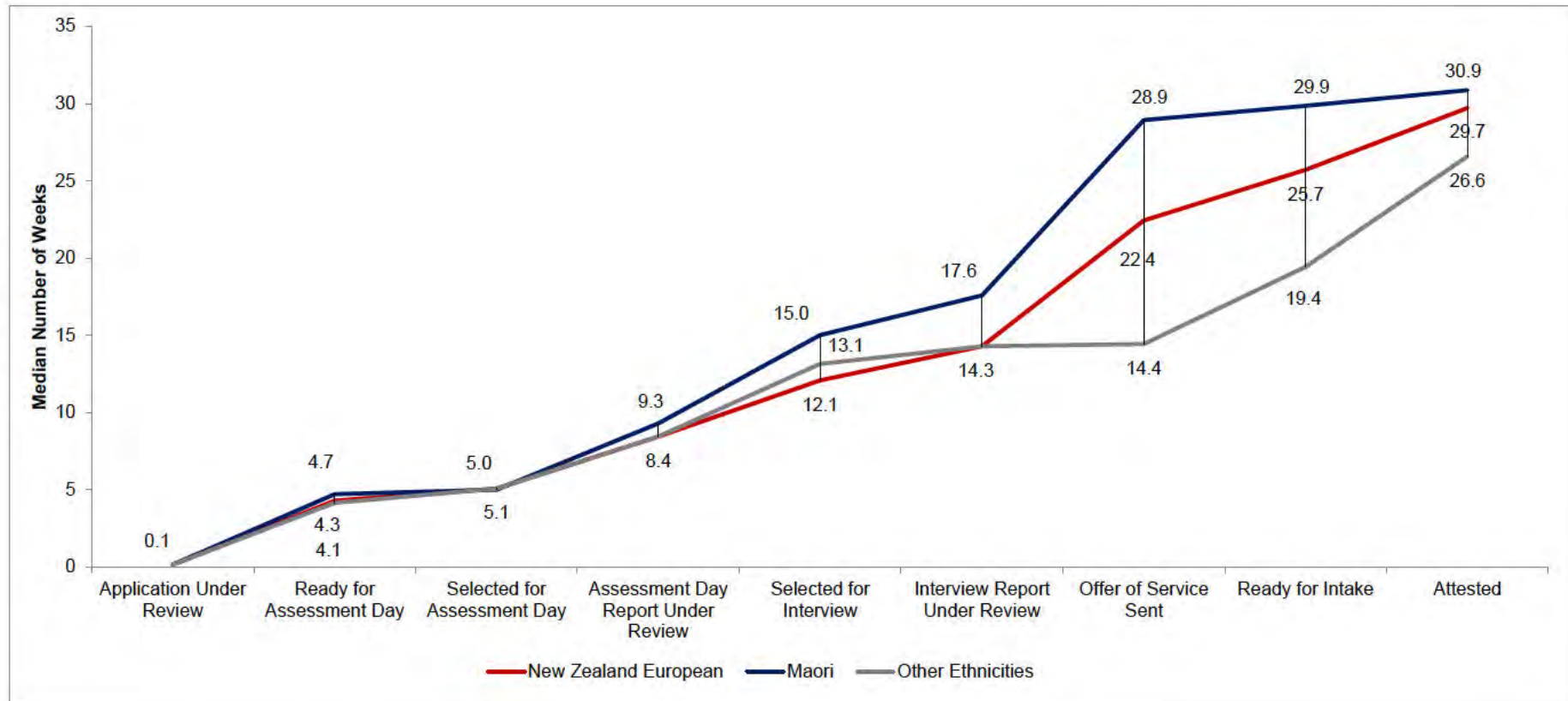
Figure 14 Timing throughout the process by ethnicity

With regards to timing, Maori moved through the process slower than other groups, whereas other ethnicity candidates and New Zealand Europeans moved through at similar rates until offer of service, at which point other ethnicity candidates moved faster through the process (see Figure 14). In fact, Maori candidates were found, on average, to take between a week to a month longer than New Zealand European candidates (and to a lesser extent other ethnicity candidates) to make it through testing and the interview. As mentioned in the previous section, it is unknown why this is the case and, therefore, additional investigation is needed to elucidate these findings.

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4.3. Outcomes at follow-up by ethnicity

New Zealand Europeans were more likely to be selected for an offer of service, and less likely to be declined than both Maori and other ethnicities (see Figure 15). For Maori, the lower rates of being selected for an offer of service seem to be a result of withdrawing, being declined and being in process at greater rates than New Zealand Europeans. However, for other ethnicities, the lower rates of being selected for an offer of service seem to be a result of being declined and stood-down at greater rates than New Zealand Europeans.
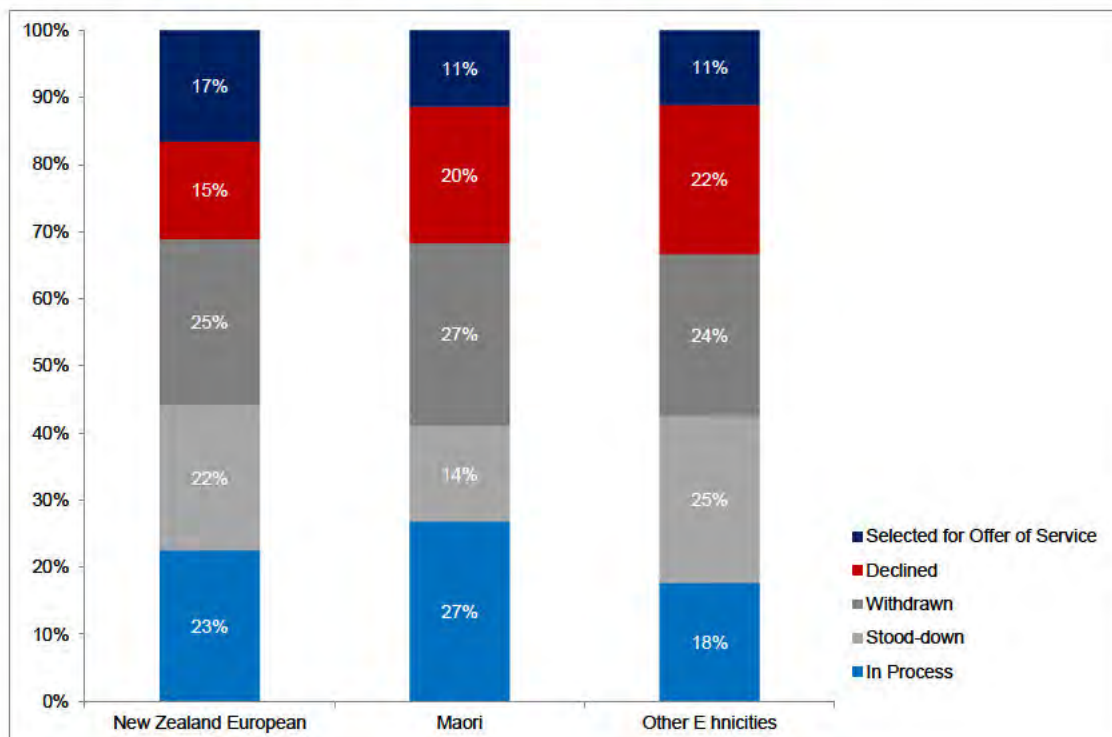
Figure 15 Outcomes at follow-up of those who completed screening by ethnicity

Similar to gender, there are two places where this could be mitigated: at testing where there are many Maori and other ethnicity candidates being both declined and stood-down, and after testing where candidates are withdrawing, meaning that they do not get through to the selection board. Therefore, similar to the suggestion made concerning gender, it is recommended that preparation activities for testing be resourced and follow-up mechanisms for stood-down and withdrawn candidates during these critical stages be instituted.

Following the results for the testing and interview scores (alongside the similar results found for female candidates), the Defence Force is recommended to support all candidates with identified desirable characteristics through both testing and the interview with a specific focus on Maori and other ethnicity applicants. Additionally, differences in stand-downs and declines at testing need to be investigated, and reasons for these outcomes made clear in order to inform more comprehensive comparisons in outcomes across groups of candidates.

Finally, the overall outcomes by both ethnicity and gender were examined. These findings illuminate results found in the subsequent sections, indicating that neither gender nor ethnicity on their own account for differences in outcomes. Specifically, the process is most favourable for New Zealand European males, followed closely by Maori males, and least favourable for other ethnicity females.

As shown in Figure 16 the major barrier for non-New Zealand European male candidates is being declined by the Defence Force. However, for most female candidates, the major barriers are stand-down and withdrawal, although these affect applicants differently depending on their ethnicity, with New Zealand European females being stood-down, Maori females withdrawing, and other ethnicity females withdrawing, being stood-down and being declined.
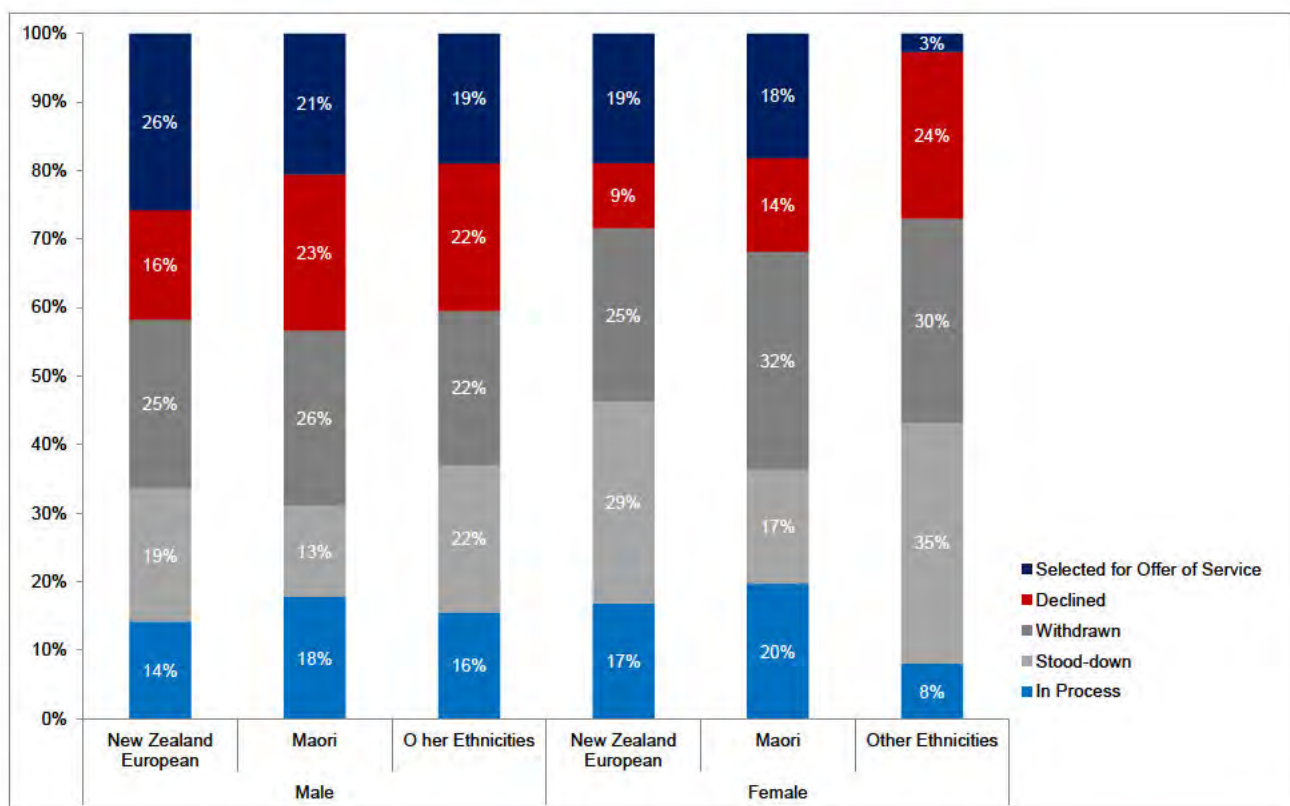
Figure 16 Outcomes at follow-up of those who completed screening by ethnicity and gender

Recommendation 7b. Examine reasons why Maori candidates are more likely to be declined and withdraw in comparison to New Zealand Europeans and why other ethnicity candidates are more likely to be declined and stood-down than New Zealand Europeans.

Recommendation 8. Institute consistent follow-up mechanisms for candidates with a focus on stood-down and withdrawn applications.

Recommendation 9. Minimise the discrepancies in timing for all candidates, but with a particular focus on discrepancies in timing for male and female applicants.

Recommendation 10. Support and enable all candidates to be well prepared for testing and encourage candidates with identified desirable characteristics to re-test upon failure of some element of testing.

5. RECOMMENDATIONS

Below are the recommendations that encompass the major themes as identified in the review. It was not expected that all recommendations would be accomplished by the completion of the report, but significant progress has been made on many of these. The following table outlines the work on these recommendations to date.

Action Commenced	Recommendation	Description of Activities
Process Implementation Recommendations		
In process	1. Minimise the wastage at the first stage of the process by automating and standardising methods of screening out non-eligible candidates.	• The ability to filter applications based on eligibility is currently being scoped by the Defence Recruitment Organisation, and will be progressively implemented based on the complexity of the factor being screened. The overall focus of these filters is to ensure that viable applications are not automatically declined, while reducing the time required by Candidate Coordinators on non-viable candidates. This work is due to be completed in September 2016.
Planned	2. Assess performance of the recruitment system against a set of agreed standards and track performance over time.	• As an ongoing part of the review of recruitment, standards and performance measures will be agreed upon by the wider organisation.
Completed	3. Set excellence benchmarks for timing and repetition throughout the stages of recruitment.	• A benchmark length has been identified at each stage of the application process and this is routinely measured and reported, with targets set to reduce the processing time of applicants. • Repetition often occurs as a normal part of the recruitment process. Unnecessary

		repetition, however, is now being managed by processes which ensure that the Candidate Coordinators are uniform in their approach to changing candidate statuses, and that these are supported by effective audit processes (see below for more information).

Completed	4. Ensure candidate information needs are being met and implement consistent methods of communication with candidates.	• Regarding consistency of communication, Standard Operating Procedures for Candidate Coordinators were introduced in December 2015 and were updated in April 2016. In addition, a quality assurance framework that measures Candidate Coordinators' compliance with Standard Operating Procedures has been produced. Training on both the updated standard operating procedures and the quality assurance framework is currently underway. These will ensure that consistent methods of communication are met.
		• Regarding candidate information needs, a variety of activities to address this are underway:
		    o Recruiters attend fitness training sessions, providing candidates with an opportunity to interact directly with uniformed recruiters which allows them to ask any questions and resolve any problems they are currently having.
		    o Force information evenings are routinely being conducted to ensure candidates and their families have an opportunity to interact with uniformed personnel and ask questions about the Defence Force and application process.
		    o Virtual recruiting and utilisation of social media as a platform to engage with potential candidates has been undertaken which provides the ability for candidates to interact in real time with one another and Defence Force staff. This initiative is in the process of being rolled out more widely in order to continue to engage potential new recruits.
		
		Preliminary results from these activities indicate that interaction opportunities are meeting candidates' information needs, as well as providing recruitment staff

		opportunities to identify the strengths of individual applicants.
Completed	5. Capture and analyse candidate data consistently and systematically across all stages of recruitment.	• Changes have been made to allow date stamping of status changes/activity within the recruitment system which enables the Defence Recruitment Organisation to report across all stages of the pipeline and to monitor the quality of the data more closely. • Candidate Coordinator Standard Operating Procedures also address many of the data issues, ensuring that applicant information is being input and updated in a standardised way. Quality assurance and auditing processes will further promote appropriate data collection practices.
Planned	6. Implement methods of identifying candidates with desirable characteristics early in the process.	• Work is planned to highlight the desirable characteristics of candidates, and ensure these candidates are recognised when they apply. This work is due to be undertaken from mid 2016, with an estimated completion date of December 2016.
Planned	7. Examine reasons for decline, stand-down, and withdrawal and compare these across candidates. *7a. Assess why women are more likely to be stood-down, and withdraw in comparison to men.* *7b. Assess why Maori*	• Changes have been made to the recruitment system such that candidates (or Candidate Coordinators) can select reasons for a decline, stand-down or withdrawal from a drop down list. This will enable a more detailed analysis of differences in outcomes across minority groups to be assessed. • As one of the reasons for differences in outcomes may be current aptitude testing, this will be reviewed with the intent to adopt a more holistic approach to gauge candidate potential. Specifically, the Defence Recruitment Organisation is considering ways in which to minimise the potential biasing effects of current testing practices by adopting an approach (similar to the New Zealand Police) where minimum pass scores on individual tests are reduced and an overall testing score is utilised to assess candidates' aptitude. This would allow

	candidates are more likely to be declined and withdraw in comparison to New Zealand Europeans and why other ethnicity candidates are more likely to be declined and stood-down than New Zealand Europeans.	candidates to leverage off their strengths and mitigate their weaknesses.
In process	8. Institute consistent follow-up mechanisms for candidates with a focus on stood-down and withdrawn applications.	• Standard Operating Procedures have been implemented in order to maintain consistency in the approach of Candidate Coordinators. The standard operating procedures require a Candidate Coordinator to verbally debrief the candidate following an Assessment Day. If the candidate is stood-down at this time an e-mail must be sent confirming the reason and the duration of the stand-down period. Furthermore, there are now a standardised series of stand-down periods that vary according to the candidate's performance during fitness testing (previously this was at the discretion of Candidate Coordinators). • Concerning withdrawn candidates, there is now a mechanism to capture (in free text) the reasons for withdrawing. Additional work will be undertaken to follow-up withdrawn candidates.
Completed	9. Minimise the discrepancies in timing for all candidates, but with a particular focus on discrepancies in timing for male and female applicants.	• Recently changes have been made from an intake based selection model to rolling or progressive selections. This has minimised the impact that a candidate's preferred trade has on the timing of their application and enabled a smoother, timelier process for all applicants. This change seems to have had a positive impact on reducing differences in timing between male and female

		candidates, and there is now a process to monitor this in an ongoing way.

Completed	10. Support and enable all candidates to be well prepared for testing and encourage candidates with identified desirable characteristics to re-test upon failure of some element of testing.	• There are a variety of initiatives which are being undertaken to prepare candidates for both aptitude and fitness testing in order to both increase the likelihood of success as well as support candidates who have failed to re-test.
		
		  o Force Fit is made widely available to candidates. This is a mobile app designed to assist candidates in developing their fitness in preparation for fitness testing on their Assessment Day.
		
		  o More examples from all aptitude tests will be made available on the Defence Recruiting website.
		
		  o Scoping is being undertaken to refer candidates who fail aptitude testing to government funded training providers.

Alongside the activities listed above, the Defence Recruitment Organisation has also commenced the following programmes which it is suggested will have positive effects on the posed recommendations:

- **Recruiter Ambassador Programme (RAP)**
  The programme involves engaging service people on a volunteer basis in order to assist with the attraction and retention of candidates. Ambassadors provide a point of contact to potential recruits, effectively expanding the recruitment capacity. This programme was launched on the 12th of May, 2016 and received over 120 volunteers within the first two days of operation.
- **Restructure of Candidate Management Centre (CMC)**
  Recently the Candidate Management Centre has been restructured in order to account for the higher workload of the Army team (which was over twice that of the Air Force and Navy teams). Army is now split into two teams, Army North and Army Central/Southern, in order to improve the quality and consistency of Candidate Coordinator service for Army candidates.
- **The Ready Programme and Force Fit 2**
  The Ready Programme is a personal fitness course designed to enable candidates and new recruits to increase their running distance and speed. The programme has been very successful in preparing candidates to meet the fitness requirements of the Defence Force, but is currently only active in the Auckland region. Following the success of the Ready Programme and the Force Fit mobile app, Force Fit 2 was also developed. Force Fit 2 consists of an eight week training programme along with accompanying exercise tutorials as well as in-

person fitness sessions which are run once a week in Auckland, Wellington and Christchurch. Force Fit 2 sessions are run by a combination of military and civilian instructors.

6. APPENDICES

6.1. Appendix 1 Methodology

The data collection process had two major phases, the first utilised data from the Prospective Candidate Management System (PCMS), and the second collected follow-up data on experiences of the recruitment process from a selection of the candidates who had opted into the study.

Phase 1: Recruitment Data from the Prospective Candidate Management System

From 24th June 2014 until 15th January 2015 new applicants (both Officer candidates and other ranks) from all services, were invited to participate in the research when they applied online to join the Defence Force. After reading an information sheet, interested candidates consented to share their application details with the Evaluation Division researchers and to be contacted in order to complete a follow up survey about the recruitment process. The only data collected at this time was gender and ethnicity information.

In total 2676 candidates who completed their application agreed to take part. Of these applicants, 2597 were unique applications from non-lateral recruits, and therefore, were included in the subsequent analyses[28]. The initial aim of the research was to examine the recruitment and selection of regular forces only. However candidates choose three trade preferences on their initial application and these can be a mix of regular and reserve trades. Further choices can be added as they progress through the system. As individuals cannot, therefore, be categorised as either regular or reserve applicants, reserve candidates are included in the sample. As such, the cohort includes approximately 200 candidates whose first trade choice was a part time position.

Throughout the data collection period, the progress of these candidates through the selection process was tracked and in August 2015, a full extract of data for each of these candidates was provided. This included details such as entry requirements, trade applications, health and police checks, assessment scores, and interview results. These data were used to report on progress through the recruitment process and difference in outcomes by gender and ethnicity at each stage of the process.

The number of candidates in the cohort represents around 50% of all the candidates who applied within a 6 month period.[29] It must be noted, however, that because the study was voluntary (i.e., applicants had to opt in), this cohort does not necessarily reflect the overall composition of all applicants to the Defence Force. Issues of bias in the sample are thought to be minimal due to the

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[28] Laterals, duplicates and cases where there was problematic data (79) were excluded from the analysis.

[29] The Defence Recruitment Organisation found that in the 2014 – 2015 financial year approximately 10,000 candidates applied to join the Defence Force.

large number of applicants in the sample and the fact that the characteristics of the cohort were analogous to the overall characteristics of average recruitment demographics.

Phase 2: Candidate Survey

At intervals of approximately three weeks during the seven months of data collection, candidates from Phase One whose status had changed to declined, withdrawn, or inactive were invited by email to complete an online survey. Reminder emails were sent after a few weeks. At the end of the data collection process, in late January, an invitation to complete the survey was also sent to all candidates whose status was "Stand down". Altogether, 1915 unsuccessful candidates were invited to take part and 877 responded. However, respondents who did not complete the majority of the survey and laterals were excluded, resulting in 822 survey responses from unsuccessful candidates being utilised. In addition, later in the process, invitations to complete the survey were emailed to the candidates from Phase One who had been sent an offer of service, of which 77 candidates responded. Figure 28 outlines the number of candidates from each phase and their outcome at follow-up.
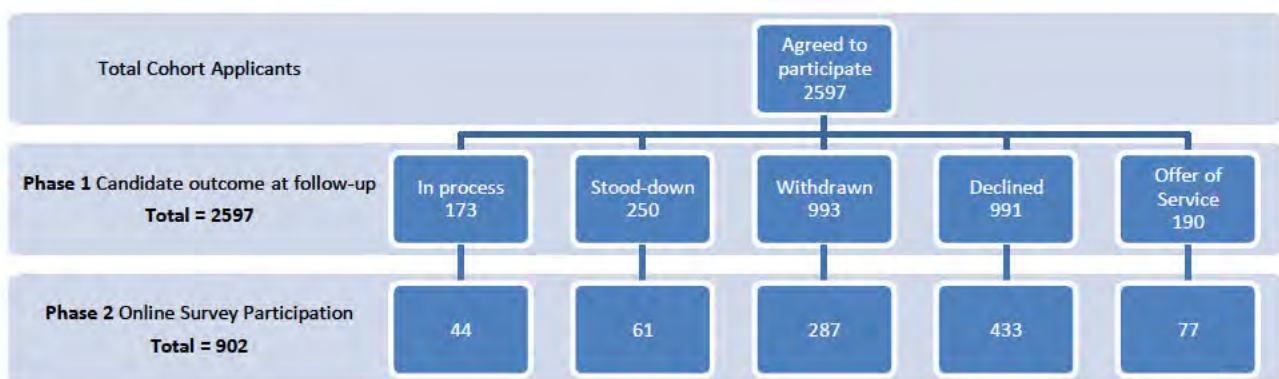

Figure 17 Phases of data collection and number of candidates per outcome

6.2. Appendix 2 Data preparation

For the purposes of the current report, in order to comprehensively examine the pathways of candidates throughout recruitment, a simplified rubric for understanding the process was developed. Specifically, the recruitment process was broadly divided into 5 stages as illustrated in Figure 1. In developing this basic map, the complexities of the recruitment and the ways in which candidate information were recorded at each stage had to be condensed into a linear process with discrete outcomes that were consistent across each of the major stages. This enables a broad overview of the process to be made and outcomes at each stage to be compared.

However, not all outcome information is collected within the system, information is often captured inconsistently, and progress through the stages is difficult to define. For instance, the reasons for candidate decline were not captured in the system, the reported final status of candidates was often not aligned with their progress through the system, and there were no clear outcomes identified in the system that indicated where a candidate had reached in the process. The result of this is that the current system did not produce reliable and accurate data about how the candidate moved through the process and the candidate's final outcome.

The status of an individual's application is recorded in the recruitment database as "Final Status". Due to irregular use of indicators under this status, and the overwriting of this information throughout the process, this was considered to be an incomplete measure of the status of the applicant. In order to better understand how individuals progressed throughout the recruitment process, the outcomes at each stage corresponding to the process map were derived from the most recently updated information drawn from the database (August 2015). The following section outlines how the categories were created, and how the final outcomes were derived.

1. **Screening outcomes**
   This variable was computed from two distinct steps in the process, the initial online application and the initial health and security checks. Outcomes at step 1 were derived from the "*candidate initial application result*" and outcomes at step 2 were derived from the "*initial health check results*". From these two steps the following discrete categories were derived;
   a. In process at screening
      i. "*candidate initial application result*" = further review, awaiting allocation, migrated data or allocated and no additional information was recorded about the candidate past this point in the process
      ii. "*initial health check results*" = additional information required, not recommended temporary, no result, pending additional information, ready for medical, ready for panel, reconsideration for review, or referred to DMED and no additional information was recorded about the candidate past this point in the process
   b. Stood-down at screening
      i. "*candidate initial application result*" = stand-down

ii. "*initial health check results*" = no additional information was recorded about the candidate past this point in the process, and the final candidate status was stood-down

c. Withdrawn at screening:
   i. "*candidate initial application result*" = phase 1 complete, no additional information was recorded about the candidate past this point in the process, and the final candidate status was withdrawn or closed due to inactivity
   ii. "*initial health check results*" = withdrawn

d. Declined at screening:
   i. "*candidate initial application result*" = failed review
   ii. "*initial health check results*" = not recommended permanent

e. Complete at screening:
   i. "*candidate initial application result*" = phase 1 complete and "*initial health check results*" = recommended

2. Testing outcomes
This variable was computed from the Assessment-Day test results and the "*final candidate status*". Only those who were complete at screening were categorised into these groups.

a. In process at testing
   i. If the candidate did not have a score for Assessment-Day, their "*final candidate status*" indicated they were in process prior to testing (*application under review, selected for assessment, ready for assessment, or assessment report under review*) and no additional information was recorded about the candidate past this point in the process.

b. Stood down at testing
   i. If the candidate did have a score for Assessment-Day, their "*final candidate status*" indicated being stood-down (*application stand-down*), and no additional information was recorded about the candidate past this point in the process.

c. Withdrawn at testing
   i. If the candidate did not have a score for Assessment-Day, their "*final candidate status*" indicated being withdrawn (*application withdrawn or closed due to inactivity*) and no additional information was recorded about the candidate past this point in the process.

d. Declined at testing
   i. If the candidate did have a score for Assessment-Day and their "*final candidate status*" indicated that they had been declined (*application declined*).

e. Complete at testing
   i. If the candidate had scores for Assessment-Day, and did not meet the aforementioned criteria as declined or as stood-down at Assessment-Day.

3. Interview outcomes

This variable was computed from the interview results and the "*final candidate status*". Only those who successfully completed Assessment-Day were categorised into these groups.

    a. In process at interview

        i. If the candidate did not have any scores for the interview, their "*final candidate status*" indicated they were in process at the interview (*selected for interview, ready for interview, or interview report under review*), or if the candidate had interview scores but had not yet received a recommendation by the Defence Force Psychologists, and no additional information was recorded about the candidate past this point in the process.

    b. Stood down at Interview

        i. If the candidate did have scores for the interview, their "*final candidate status*" indicated being stood-down (*application stand-down*), and no additional information was recorded about the candidate past this point in the process.

    c. Withdrawn at interview

        i. If the candidate's "*final candidate status*" indicated being withdrawn (*application withdrawn or closed due to inactivity*) and no additional information was recorded about the candidate past this point in the process.

    d. Declined at interview

        i. If the candidate did not have any scores for the interview, their "*final candidate status*" indicated that they had been declined (*application declined*), or if the candidate has an interview record and the interviewer has recommended that the candidate not be selected for review as coded from the interview notes, and no additional information was recorded about the candidate past this point in the process.

    e. Complete at interview

        i. If the candidate has an interview record and the interviewer has recommended that the candidate be selected for review as coded from the interview notes.

4. Selection Outcomes

This variable was computed from the "candidate status" in the trade information. Only those who successfully completed the interview were categorised into these groups.

    a. In process at selection

        i. If the "*final candidate status*" indicated they were in process prior to the selection review (*ready for selection, or consider for selection*), or if the candidate was recommended for selection, no additional information was recorded past this point in the process, and their final status was not withdrawn, closed due to inactivity, or declined.

    b. Stood down at Selection

i. If the "*final candidate status*" indicated being stood-down (*application stand-down*), and no additional information was recorded about the candidate past this point in the process.

c. Withdrawn at Selection

i. If the "*final candidate status*" indicated being withdrawn (*application withdrawn or closed due to inactivity*) and no additional information was recorded about the candidate past this point in the process.

d. Declined at Selection

i. If the "*final candidate status*" indicated that they had been declined (*application declined*), and no additional information was recorded about the candidate past this point in the process.

e. Complete at selection

i. If an offer of service had been proposed by the Defence Force.

5. Attestation

This variable was computed from the "*final candidate status*". Only those who were selected for an offer of service were categorised into these groups.

a. Offer of service made

i. If the *final candidate status* = offer of service made

b. Offer of service accepted

i. If the *final candidate status* = offer of service accepted

c. Attested

i. If the *final candidate status* = attested

6. Final outcomes

a. In Process

i. Includes all individuals whose final status is "in process" as defined by each stage of the recruitment process: in process at screening, in process at testing, in process at interview, and in process at selection.

b. Stood-down

i. Includes all individuals whose final status is "stood-down" as defined by each stage of the recruitment process: stood-down at screening, stood-down at testing, stood-down at interview, and stood-down at selection.

c. Withdrawn

i. Includes all individuals whose final status is "withdrawn" as defined by each stage of the recruitment process: withdrawn at screening, withdrawn at testing, withdrawn at interview, and withdrawn at selection.

d. Declined

i. Includes all individuals whose final status is "declined" as defined by each stage of the recruitment process: declined at screening, declined at testing, declined at interview, and declined at selection.

e. Selected for offer of service

i. If an offer of service had been proposed by the Defence Force.

6.3. Appendix 3 Glossary of terms

Attestation: The official process of being enrolled for military service.

Candidate Coordinator: A Defence Force staff member who is responsible for the management of a set of candidates.

Complete: In reference to the outcomes of applicants at each stage this means that the candidate successfully completed the stage and was eligible to move on to the next.

Declined: In reference to the outcomes of applicants at each stage this means that the Defence Force decided that the candidate did not meet the criteria for the stage and initiated a decline decision.

In process: In reference to the outcomes of applicants at each stage this means that the candidate's application was under review, pending documentation, or otherwise without a final decision at one of the stages.

Interview: In reference to a stage of recruitment where candidates sit an interview in which they are rated on organisational fitness with respect to their chosen commission, their aptitude for their chosen service and trade, and their academic qualifications.

Lateral: Refers to candidates who are active members of other militaries who have applied to join the Defence Force.

Offer of Service: A formal letter of offer for a position within the Defence Force.

PCMS Prospective Candidate Management System: The name of the system which is used to manage candidates and to collect data about their progress throughout recruitment.

Screening: In reference to a stage of recruitment where all applicants complete an online application which is checked by candidate coordinators to ensure that the individual meets the minimum entry requirements for education, residency, and health in order to proceed through the process.

Selection: In reference to a stage of recruitment where eligible candidates are selected from the pool of those who have been recommended by the interviewers for any trade openings.

Stood-down: In reference to the outcomes of applicants at each stage this means that the candidate was put on hold by the Defence Force because they did not currently meet requirements (e.g., residency, health, testing). This "stand-down" period meant that the candidate's application was still active, but without a final decision at one of the stages.

Testing: In reference to a stage of recruitment where candidates who have passed initial screening undergo an Assessment-Day during which they take a series of aptitude and physical tests in order to meet the requirements for their selected service and trade.

Withdrawn / Closed due to inactivity: In reference to the outcomes of applicants at each stage this means that the candidate decided that they no longer wanted to continue with the process or their application was closed because they did not follow-up with their Candidate Coordinator.