

Safeguarding subgroup identities: recommendations for enhancing  
attitudes towards blue lights interoperability  
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## Executive Summary

This research sought to investigate the relationship between organisational identity and attitudes towards interoperability across the Police, Fire and Rescue, and Ambulance Services. Although the study ran with the support of JESIP, it was not designed to test or evaluate JESIP directly. Instead, it sought to identify how different mindsets related to organizational identity might promote or inhibit attitudes towards multi-agency colleagues and interoperability.

A total of 320 participants from the UK Emergency Services took part in the study, of which 91 were Police Officers, 65 Firefighters and 164 Paramedics. Participants' years experience ranged from 0.5 – 42 years, with a mean of 17 years. The cohort included respondents from operational through to senior command levels in each service (Table 1).

**Table 1: Percentage of participants in each rank, per service**

Police Rank	% of sample	Fire Rank	% of sample	Ambulance Rank	% of sample
Constable	35.4	Firefighter	12.5	Paramedic	52.2
Sergeant	21.5	Crew Manager	7.8	Team leader/ Supervisor	10.7
Inspector	27.8	Watch Manager	20.3	Senior Paramedic	8.8
Chief Inspector	8.9	Station Manager	26.6	Specialist Paramedic	11.9
Superintendent	5.1	Group Manager	20.3	Operations Manager	10.1
Chief Superintendent	1.3	Area Manager	6.3	Divisional Manager	1.9
		Assistant Chief Fire Officer	3.1	Head of Service	2.5
		Deputy Chief Fire Officer	1.6	Director of Operations	1.9
		Chief Fire Officer	1.6		

Participants completed an online questionnaire, which was split into two sections:

- Part 1 collected data relating to general perceptions about one's profession and fit within the emergency services as a whole.
- Part 2 collected data on the relationship between organisational identities and attitudes towards interoperability.

There were 4 key findings:

1. Attitudes towards interoperability were enhanced by making sure professional (subgroup) identities were recognized.
2. Attitudes towards interoperability were diminished by making common (emergency responder) identities salient.

3. Of all three services, Firefighters had the most positive attitudes towards professional outgroups (Police, Paramedics), but felt least connected to the Emergency Services as a whole.
4. Of all three services, Police had the highest indicators of identity threat. Their attitudes towards professional outgroups (Firefighters, Paramedics) became more negative when asked to consider themselves as part of a common (emergency responder) group, rather than their professional subgroup.

The implication for this research is that a one-size-fits-all approach to achieve blue light interoperability is not advisable. Specifically, training and interventions to enhance interoperability should be sensitive to safeguard specific professional (subgroup) identities. This will reduce the risk of professional identity threat, and promote more positive attitudes towards blue lights interoperability.

Part 1a: The perceived characteristics of emergency roles

Participants were asked to identify up to four characteristics that they would use to describe Police Officers, Firefighters and Paramedics. Data was qualitatively coded and split to represent internal (own service) and external characteristics (attributes of other agencies).

**1. Police Characteristics**

The characteristics of Police Officers, as identified by Police Officers, were largely focussed on professional qualities (Figure 1). These included, being resilient (24%), brave (22%), professional (15%), a good communicator (14%) and decisive (14%). Firefighters and Paramedics focussed on the personal qualities of Police Officers, which reflected their interactions with Police Officers. The most common attribute was being authoritative (20%), followed by being brave (16%), honest (16%), calm (11%) and trustworthy (11%).



Figure 1: Police Characteristics identified by Police (left) and Firefighters/Paramedics (right)

**2. Firefighter Characteristics**

There were three core characteristics identified by Police Officers and Paramedics when describing Firefighters (Figure 2) - being brave (38%), a team player (32%) and physically fit (25%). The attributes they used to describe Firefighters were largely focussed on practical

necessities related to the role, also including being disciplined (16%) and strong (13%). Firefighters themselves used more variety in describing their attributes. They included practical aspects of the role, such as being brave (18%), fit (13%) and adaptable (13%), but also identified more personable and compassionate aspects of the role, such as being caring (15%) and empathetic (12%).



Figure 2: Firefighter Characteristics identified by Firefighters (left) and Police/Paramedics (right)

### 3. Paramedic Characteristics

The characteristics used to describe paramedics were the least varied across participants and focussed on compassion and patient care (Figure 3). The top three attributes identified by Paramedics themselves and Police/Firefighters were identical. They were being caring (47% - Paramedics; 57% - Police/Firefighters), calm (22% - Paramedics; 19% - Police/Firefighters) and empathetic (22% - Paramedics; 18% - Police/Firefighters).



Figure 3: Paramedic characteristics identified by Paramedics (left) and Police/Firefighters (right)



Figure 4: Attributes of the Emergency Services

#### 4. Emergency Services Characteristics

Data was also coded to identify the characteristics that were most representative of the Emergency Services as a whole (Figure 4). These were being caring (70%), brave (55%), calm (38%), a team player (37%), and professional (35%).

Part 1b: What are the best things about working for the Emergency Services?

Participants were asked to describe the features of their profession that they thought would appeal to new recruits. We thematically coded the data into seven core themes (Figure 5).

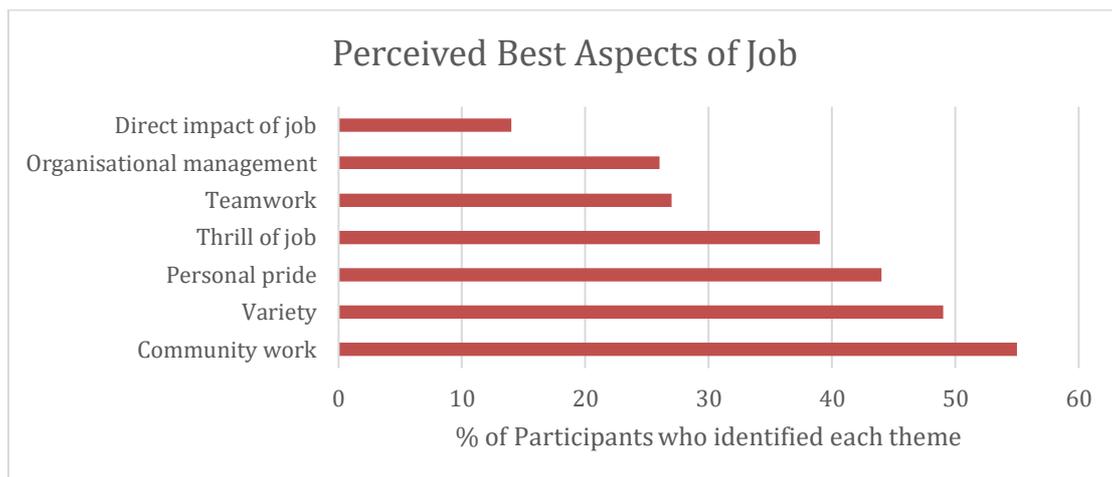


Figure 5: Best Aspects of the Job as an Emergency Responder

- 1. Working with the Community (identified by 55% of participants).** Community work was a core theme described by participants and it was the most commonly identified feature of emergency working. It was specifically related to four aspects of community working: (i) providing a general community service: *“providing an essential service to your community”*; (ii) working with a diverse community: *“working with different people, different settings and different circumstances”*; (iii) helping those in need: *“bringing a new life into the world, helping someone leave this world with dignity and a hand to hold”*; and (iv) protecting the vulnerable: *“caring for a wide variety of people in society at the most vulnerable times of their lives”*.
- 2. The variety of the job (49%).** The second most prevalent theme was related to the variety of experiences during emergency work. This was not broken into sub-themes as it was a strong theme by itself: *“every day is different, I never know where or what the next*

*incident will be or what my working day will deliver”; “never the same day at work twice, diversity of the role – it’s not just firefighting”; “not knowing what you will be dealing with every time you attend work”.*

3. **Personal Pride (44%).** Participants also described a sense of personal pride in their job by identifying that it was a unique and meaningful career. This was split into three specific sub-themes: (i) making a difference: *“finishing each day knowing you’ve made a difference to someone’s life”*; (ii) being respected by one’s community: *“being held in esteem by the public”*; and (iii) the rewarding nature of the job: *“that heart felt thank you from a patient or relative, or that hand shake from a fellow officer following an incident is at the hearth of the emergency services, it’s what makes you want to get up and do it all again”*.
4. **Thrill of the Job (39%).** Participants described a number of different features of their job that related to a sense of thrill, both emotionally and cognitively. This was split into four sub-themes: (i) the challenge of the job: *“the job is challenging and encourages you to exercise your brain daily”*; (ii) excitement: *“the thrill of attending incidents where I can make a difference to someone’s life”*; (iii) critical thinking: *“the best part of being an emergency responder is being responsible for dealing with the most urgent situations, often operating with minimal information, being tested in ways you didn’t think you could be, and knowing that what you are doing is important”*; and (iv) the thrill of emergency driving and physicality of the job.
5. **Teamwork (27%).** A further core theme identified by participants was related to the importance of teamwork in their role. This was split into three sub-themes that described how and why teamwork was important: (i) sense of belonging with colleagues: *“I love the comradery and working in a team of like-minded people”*; (ii) gaining new friends and a ‘work family’: *“within the ambulance service you really do gain a new family, a green family”*; and (iii) working as a part of the larger emergency response team: *“the feel of belonging to the emergency services is fab – knowing that you work as part of an enormous team, but you will be able to work collectively in any situation”*.
6. **Organisational Management (26%).** Participants also described a number of career-related benefits to working for the emergency services. These included: (i) skills and personal development opportunities: *“ability to learn lots of skills and specialize in numerous strands of work”*; (ii) having autonomy in operational practice: *“freedom to act independently and be responsible for own actions”*; and (iii) good working conditions (i.e., job security, shift work, pay).
7. **Direct Impact of the Job (14%).** The final theme identified by participants related to the direct impact of their job, such as preventing crime and saving lives: *“it’s exciting saving lives, solving crime and putting criminals away behind bars”*. It is interesting that this theme is perhaps the most obvious and direct feature of emergency work, but it was the least commonly identified feature by emergency workers themselves.

## Part 1c: Perceived prototypicality

Prototypicality is a measure that is used to identify how representative different groups perceive themselves and others to be in relation to a shared group (i.e., emergency services).

- **Ingroup prototypicality** – there were no differences between services in how representative they perceived their *own* group to be of the emergency services as a whole.
- **Outgroup prototypicality** - there was found to be a significant difference in how representative participants perceived *other* groups to be to the emergency services. Specifically, **Firefighters were perceived as being the least representative group of the emergency services as a whole (by outgroup members)** (Figure 6).

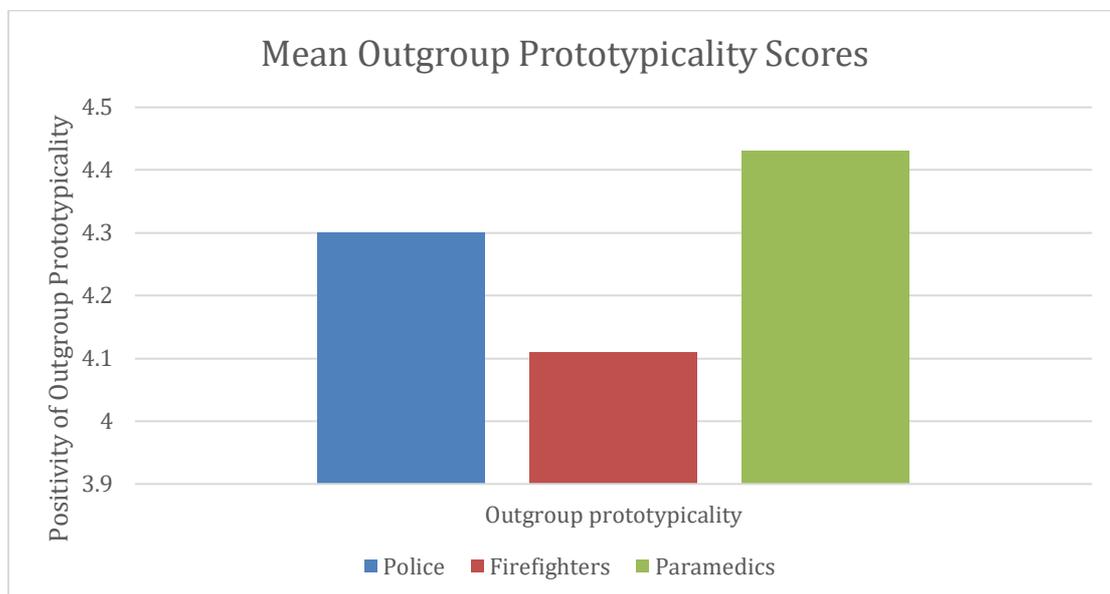


Figure 6: Mean outgroup prototypicality scores for Police, Firefighters and Paramedics

## Part 2: Manipulating Organisational Identity

Research has shown that the way people think about their social identity influences their attitudes and behaviors. For example, a person who identifies strongly as a Liverpool Football Club fan is likely to hold more negative attitudes towards Everton Football Club fans and more positive attitudes to fellow LFC supporters.

Research has found that asking people to think about their identities in different ways can change their attitudes and behaviors. For example, when football fans were asked to think about their own team (subgroup) then they were less likely to help to a stranger in a rival team's football shirt. However, when asked to think about their identity as a football fan (common group), they were more likely to help a stranger in a rival team's football shirt.

Subgroups can create distance and negative attitudes; whereas common groups can remove these effects.

In workplace contexts, this is termed your 'organisational identity', and it can influence your attitudes and behaviours at work. For this study, we were interested in seeing how different organisational identities might influence attitudes towards interoperability. We randomly split participants into one of three groups, where we prompted them to think about different organisational identities:

1. **Subgroup Identity** – participants were asked to consider their role as a Police Officer, Firefighter, or Paramedic (depending on their role)
2. **Common Group Identity** – participants were asked to consider their role as an Emergency Responder
3. **Dual Group Identity** – participants were asked to consider BOTH their roles as an Emergency Responder, and as a Police Officer, Firefighter, or Paramedic.

Participants then completed the survey, which included a number of standardized scales for measuring attitudes to different groups. We were interested to see whether thinking about one's organizational identity in different ways (subgroup, common or dual) would influence attitudes towards interoperability. We were also interested to see whether these effects interacted with the participant's profession (i.e., Police Officer, Firefighter or Paramedic).

### Part 2a: Outgroup Attitudes

Outgroup attitude scores were generated by asking participants to rate their attitudes towards the other emergency service professions. There was a significant interaction between the effects of profession and organisational identity on outgroup attitudes (Figure 7):

- Police Officers held significantly more **negative** outgroup attitudes when in the **common identity** condition.
- Firefighters held significantly more **positive** outgroup attitudes when in the **subgroup identity** condition.

It was also found that:

- **Firefighters** held significantly more **positive** outgroup attitudes overall.
- Those in the **common identity** condition had significantly more **negative** outgroup attitudes than those in the professional (subgroup) condition.

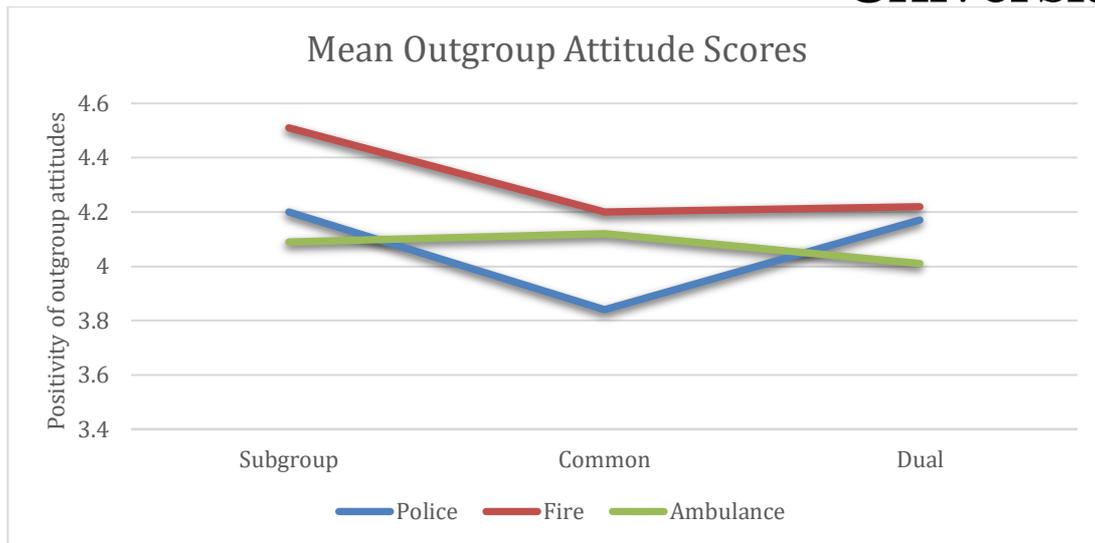


Figure 7: Mean Outgroup Attitude Scores

Taken together, findings suggest that organisational identities influence outgroup attitudes. Police Officers became more negative towards outgroups when thinking about their common identity – **suggesting identity threat**. Firefighters became more positive towards outgroups when thinking about their subgroup identity – **suggesting a subgroup identity enhancing effect**. More broadly – common group identities had a *negative* effect on outgroup attitudes; whereas subgroup identities had a *positive* effect on outgroup attitudes.

Part 2b: Indispensability

Participants were asked to rate how indispensable they perceived each of the emergency service professions to be to the emergency services as a whole. An indispensability bias score was calculated to identify how indispensable they perceived other organisations to be, relative to their own organization (Figure 8).

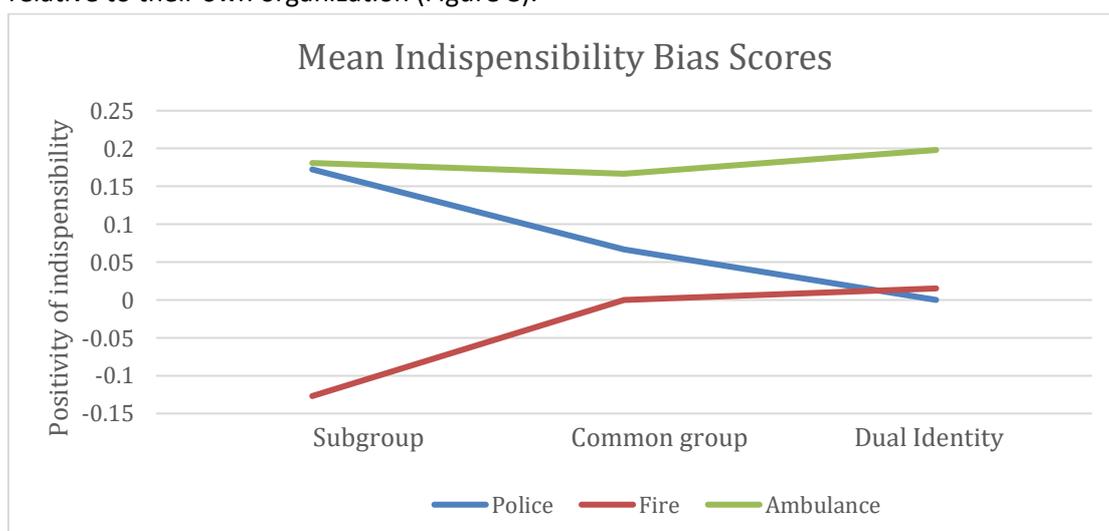


Figure 8: Mean indispensability bias scores

It was found that **Firefighters showed significantly more indispensability bias** compared to the Police and Paramedics. They perceived their own profession as significantly less indispensable to the emergency services, relative to the Police/Paramedics (as indicated by their lower scores in Figure 8).

**Part 2c: Perceived Overlap**

Participants were also asked to rate how much overlap they perceived between the different emergency service professions and the emergency services as a whole. This is a similar measure to indispensability, but is more indirect (i.e., asking participants to rate visual depictions of overlap between groups).

As above, it was found that **Firefighters showed significantly greater overlap bias**. As in Figure 9, they had greater scores, which shows that they perceived greater overlap between the Police/Paramedics (outgroups) and the emergency services (as a whole), relative to themselves. This provides further evidence to suggest that Firefighters perceive their organization as being less connected to the Emergency Services overall, compared to their multi-agency colleagues.

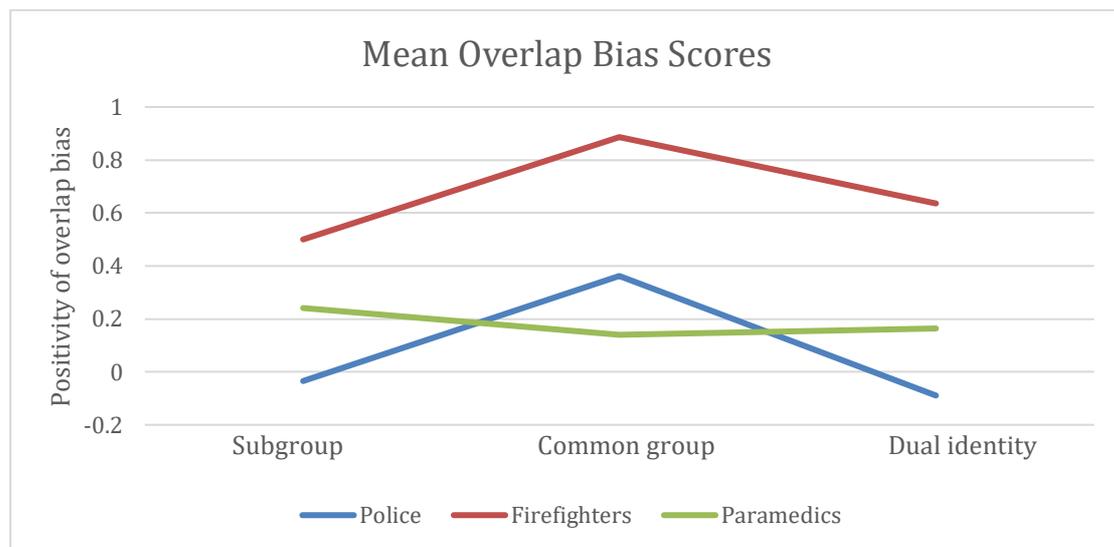


Figure 9: Mean overlap bias scores

**Part 2d: Identification**

Participants were asked to score how strongly they identified with their professional (subgroup) identity, their common (emergency responder) identity and their dual identity (subgroup AND common group).

- **Professional (subgroup) Identity** – there were no differences between groups in how much they identified with their professional (subgroup) identity. All professions identified **more strongly** with their professional subgroup than their common group (Figure 10).

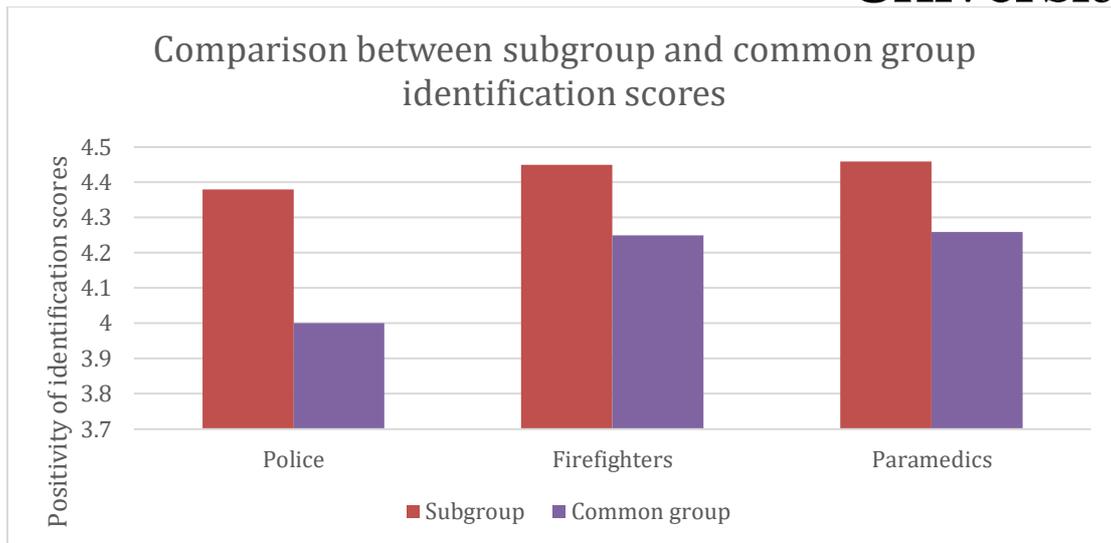


Figure 10: Comparison of scores between subgroup identification and common group identification for Police, Firefighters and Paramedics.

- Common (emergency responder) Identity** – there was no interaction effect between profession and organisational identity on common group identification. However, there was found to be a main effect of profession. **Police Officers had significantly lower common group identification** compared to Firefighters and Paramedics (Figure 11).

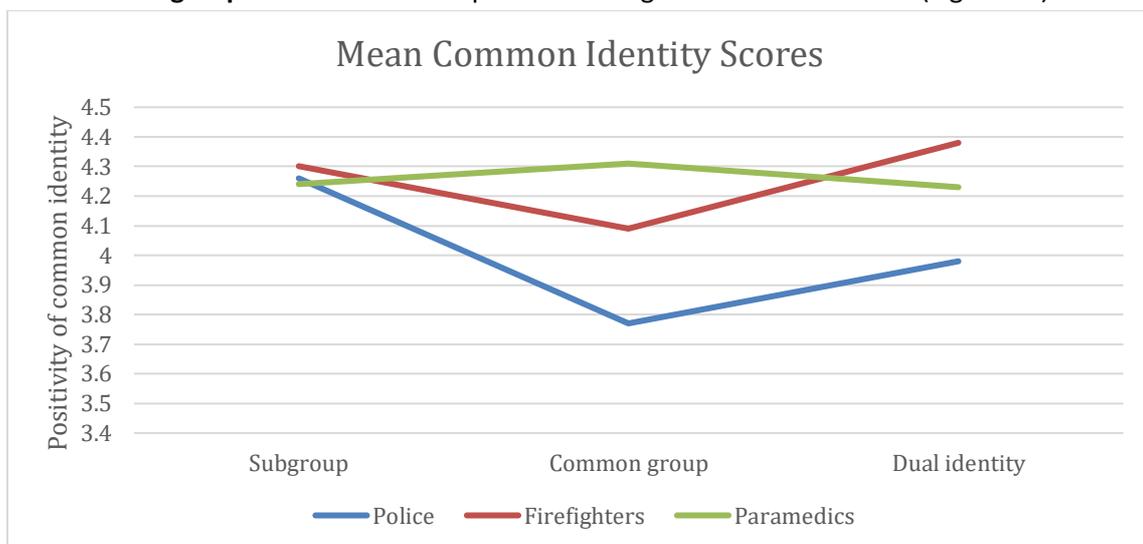


Figure 11: Mean Common Identity Scores

- Dual identity** – there was found to be no interaction effect between profession and organisational identity on dual identity. However, there were found to be significant main effects (Figure 12).
  - Police officers had significantly lower dual identity** compared to Firefighters and Paramedics.
  - Those in the subgroup condition had significantly higher dual identity** compared to those in the common group and also (non-significantly) the dual group.

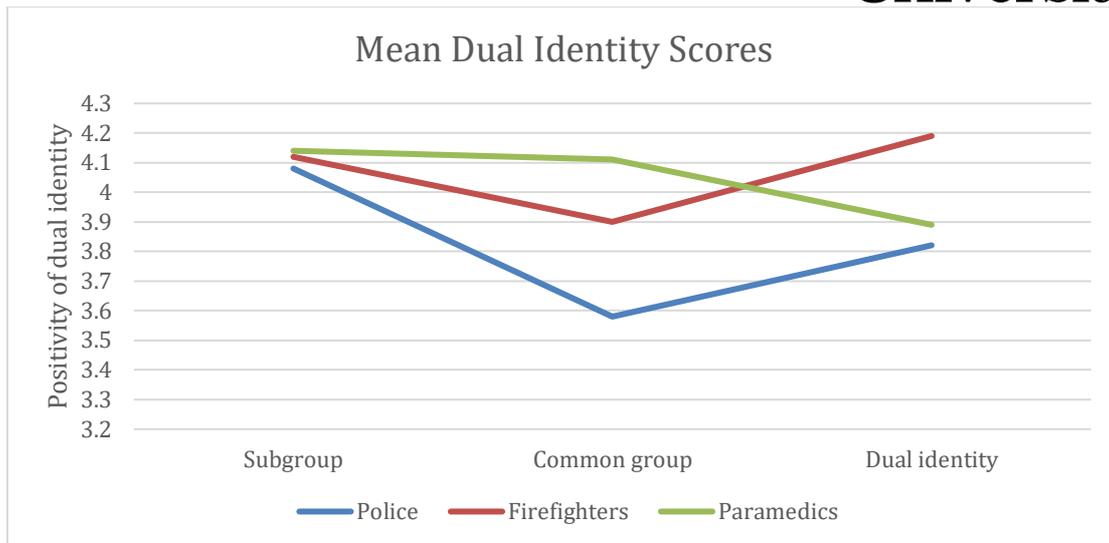


Figure 12: Mean Dual Identity Scores

Taken together, findings indicate that:

- Participants felt most connected to their professional (subgroup) identity overall
- Police Officers felt least connected to the emergency services as a whole
- For all participants, safeguarding professional (subgroup) identities fostered a greater sense of connection with inter-agency colleagues (dual identities).

### Implications and Future Directions

There are 4 key findings from this report:

1. **Interoperability can be enhanced by safeguarding professional (subgroup) identities.** Participants identified more strongly with multi-agency colleagues when they felt that their professional (subgroup) identity was salient.
2. **Interoperability can be diminished by promoting common (emergency responder) identities.** Participants held more negative outgroup attitudes when thinking about their 'common' (emergency responder) identity.
3. **Firefighters felt least connected to other emergency responders.** Specifically, they perceived their profession as being less essential and less connected to the emergency services than other professions.
4. **Police Officers showed evidence of identity threat.** Specifically, they had the lowest ratings for shared identity with other emergency responders, suggesting that they do not identify with other emergency workers. Further, when made to think about their common identity, their attitude towards outgroups became more negative.

### What do findings mean for practice?

Training to enhance interoperability between the three blue lights services should ensure that **professional (subgroup) identities are safeguarded and promoted during training**. Training must avoid collapsing professions under a shared 'emergency services' identity, as this was associated to negative outgroup attitudes and identity threat. This might be achieved by

ensuring that multi-agency training focusses on how to collaborate together and draw on distinct professional strengths. Training should avoid blurring professional boundaries by asking responders to consider themselves as one 'Emergency Services' organization. Example ways to achieve this might be through: ensuring that the distinct strengths of each profession are protected and made salient, making sure roles are not blurred, and focusing on collaborative goal management between the professions. Further research is needed to develop and test training interventions that are tailored to promote interoperability by safeguarding professional identities. This would provide a scientific basis to support interoperability training and practice.