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Abstract
Recent research suggests that mentors can enhance their mentees’ mental health. Yet little is known about the effect of mentoring on the anxieties of the mentors themselves. We hypothesise that mentoring programmes can have a positive impact on both mentees’ and mentors’ mental health. In a multi-method longitudinal study, we explore empirically the effect of a formal mentoring programme in the English police force on senior police officers’ levels of anxiety. In the first step of our study, we conducted a field experiment. This experiment yielded preliminary results that suggest mentors may experience marginally lower levels of anxiety and feel as if their job is more meaningful when they participate in the mentoring programme. As a second step, we qualitatively investigated the subjective experience of the participants to explain and substantiate our findings. We found that mentoring relationships provide a unique context for mentors to discuss and normalise their concerns, to share ideas for managing anxieties, and to find more meaning in their work. We discuss our findings in terms of mentoring theory and consider their practical implications for improving mental health in the workplace.

Keywords: police; mentoring; mental health; phenomenology
**Introduction**

In England alone, the annual expenditure on healthcare for mental illness is £14 billion (LSE CEP, 2012). In addition, mental illness reduces England’s gross domestic product by £52 billion each year, reflecting the loss of output from individuals who are unable to work or to work to their full capacity (LSE CEP, 2012; Centre for Mental Health, 2010). As such, mental illness is a serious concern not just for individual employees but also for their employers and wider society.

One approach to address mental health issues in the workplace is mentoring. Mentoring is a relationship where a more experienced individual (the mentor) provides guidance and support to a less experienced organizational member (the mentee) (Kram, 1985). Mentoring theory (Ragins & Kram, 2007) suggests that mentors can provide their mentees with two types of support: career-related and psychosocial (Kram, 1985; Noe, 1988; Ragins & McFarlin, 1990). Psychosocial support typically takes the form of counselling, friendship, or personal and emotional guidance (Fowler & O’Gorman, 2005). Career-related support in mentoring relationships can help mentees to “learn the ropes,” leading to higher job performance ratings and enhanced satisfaction (Scandura & Williams, 2004). Collectively, psychosocial and career support can build mentees’ trust with their mentors, which is also assumed to yield socio-emotional benefits (Young & Perrewe, 2000). These two types of support indicate that mentoring has positive implications for the mental health of mentees. Relatedly, a recent meta-analysis of mentoring research demonstrated that mentoring programmes can reduce mentees’ stress and strain (Eby et al., 2008).

There is, however, much less empirical evidence to assess if the mental health benefits of mentoring extend to the mentors themselves. Taking the mentor’s
perspective is crucial in designing efficient mentoring programmes (Ragins & Scandura, 1999; Allen, 2007). In a similar way to mentees, mentors might also enjoy both psycho-social and career-related mental health benefits, albeit in different ways and through different mechanisms. The absence of evidence regarding the positive effect of mentoring on mentors’ mental health reflects a broader issue in mentoring research and theory, where studies tend to focus on mentees (Allen et al., 2008). This issue is compounded by the fact that more than 80% of mentoring research is purely quantitative and cross-sectional (Allen et al., 2008), which limits opportunities for mentors to discuss or explain their experiences. In this way, understanding the complex link we could expect to find between mentoring and mental health may require fine-grained qualitative approaches (Schonfeld & Mazzola, 2015), in addition to more formal quantitative testing. The relationship between mentoring and mental health remains to be fully explored (Eby et al., 2008).

To deepen our understanding of how mentoring may inform both mentors’ and mentees’ workplace anxieties, we examined English police officers who volunteered to participate in a formal mentoring programme as either mentors or mentees. This is an appropriate setting as mental health issues are particularly prominent within occupations that play important social roles, such as the military (Hatch et al., 2013; Caddick et al., 2015), medical professions (Yelin et al., 1996), firefighters and, police officers (Alexander & Walker, 1999). To ascertain the impact of a mentoring programme on anxiety, in particular, we employed an abductive approach that lends itself to the use of mixed methods (Timmermans & Tavory, 2012; Wheeldon, & Åhlberg, 2012). This allowed us to begin by testing our baseline proposition that a mentoring programme can reduce anxiety levels through a field experiment occurring over eight months. In this experiment, we compared a treatment set of mentor-mentee
dyads that actually experienced the mentoring programme to a control group of similar police officers. To build on the insightful yet restricted findings established through this experiment, we refined our exploration of the benefits of mentoring through an extensive longitudinal qualitative study. Our qualitative approach utilized phenomenological interviews to elicit the experiences of a separate cohort of mentors and mentees over nine months.

This study provides several contributions to mentoring theory. First, it unveils the positive role of mentoring in anxiety-prone work settings for mentors themselves. It therefore helps to provide a fuller account of mentoring by exploring the impact on mentors, as previous literature has tended to focus on mentees (Chun et al., 2012). Second, it adds to the limited longitudinal and qualitative studies that explore the subjective experiences of mentoring participants, particularly in terms of their mental health. This qualitative exploration reveals how mentoring can reduce mentors’ anxieties by providing a unique context for officers to discuss and normalise their concerns while also making their work more meaningful. This has significant practical and societal implications as it demonstrates how the organizational practice of mentoring can support the mental health of some professionals who play crucial social roles.

LITERATURE REVIEW AND THEORETICAL ARGUMENT

Mentoring and mental health

More than thirty years ago, Kathy Kram’s (1983; 1985) qualitative research identified two broad functions of mentoring in the workplace: career and psychosocial support, both peaking during the cultivation period of the mentoring relationships. Career functions described mentors providing their mentees with sponsorship, coaching, and
challenging work assignments to enable them to understand corporate life and develop their careers. Psychosocial functions referred to role modelling, counselling, and friendship.

In light of the perceived value of such support, numerous organizations have seized upon mentoring programmes as a way to enhance their employees and organizations’ performance (Ragins & Cotton, 1999). Formal mentoring programmes have also been established to help overcome work-related issues (Chun, Sosik, & Yun, 2012). These mentoring programmes establish formal dyads wherein a senior employee is expected to provide career and general support to a junior employee (Kram, 1985; Wanberg, Kammeyer-Mueller, & Marchese, 2006).

The extant literature suggests that both the career and psychosocial function of mentoring is likely to improve mentees’ mental health and, potentially, to reduce their anxieties. Career-related support can lead to higher job performance ratings and enhanced satisfaction (Scandura & Williams, 2004). Career-related support would also be expected to deliver emotional and mental health benefits by creating trustful relationships in the workplace (Young & Perrewe, 2000): mentees experience a greater cohesiveness and have confidence in the holistic support of their mentor. Psychosocial functions include counselling and friendship, which provided mentees with an increased sense of competence, effectiveness, and self-worth (Fowler & O’Gorman, 2005).

For mentees, there are clear benefits of mentoring in terms of self-efficacy (Day & Allen, 2004), which can help them respond effectively to their work environment and face the causes of anxiety (Chun et al., 2012). Eby et al.’s (2008) meta-analysis of the effect of mentoring programmes on mentees indeed found a significant reduction in their stress. Affective well-being is one of the mutual and
shared outcomes of mentoring programmes for mentors and mentees (Chun et al., 2012). For instance, Siegel and Reinstein (2001) showed how mentoring programmes helped employees deal with the stress generated by a merger between accounting firms. Mentoring may therefore provide a preventive approach to anxiety by developing relationships that provide support in certain circumstances. It may also provide a curative or remedial function by providing an opportunity for individuals to share their concerns with a trusted colleague, creating a supportive relationship that might otherwise not exist.

For mentors, however, there is only a small body of research that explores how their mental health may be affected by mentoring. Beyond the work of Ragins and Scandura (1999) on the costs and benefits of mentoring, some research has touched on the positive outcomes for mentors in terms of their well-being (Gentry et al., 2008; Chun et al., 2012; Mullen, 1994). As Chen et al. (2012, p. 1088) noted, additional longitudinal studies are “warranted to examine whether serving as an effective mentor is an affective burden or aid.” This lack of clarity reflects a larger absence of studies that examine the perspective of mentors, in particular through fine-grained qualitative exploration of mentoring experiences. Indeed, in their review of over 200 published mentoring articles, Allen et al. (2008) highlighted that mentees were the primary focus of inquiry in over 80% of mentoring articles. While establishing the effect of mentoring relationships on mentors’ mental health is of practical value, further research on mentors themselves “is necessary to fully understand a mentoring relationship” (Allen et al., 2008, p. 351).

**Police officers and anxiety**
Anxiety and stress in the police have been a widely explored in the psychology and organizational behaviour literature (Abdollahi, 2002). This is perhaps unsurprising given that researchers have identified policing as one of the most demanding professions (Cooper & Anderson, 1982). Both the nature of their duties and their work context are potential sources of anxiety (Alexander & Walker, 1997). For instance, abuse, threats, physical injuries, and the risk of death (Violanti & Aron, 1994) alongside inherent uncertainty (Brown, Cooper, & Kirkcaldy, 1996) are some of the most commonly identified sources of anxiety. Officers also perform a social role that can be viewed negatively by the public that they serve, producing feelings of isolation (Kroes, Margolis, & Hurrell, 1974; Roulet, 2017). Moreover, police forces and their officers face increasing political pressure to become more efficient (Brown et al. 1996) and yet officers are expected to exhibit mental strength in challenging situations (Carlan & Nored, 2008).

There is, however, variance in terms of the sources of police officers experiences of anxiety. Junior police officers tend to experience anxiety because of long hours and lack of available manpower to carry out their work. More senior officers are often stressed by the maintenance of good relationships with the community and the public recognition of policing (Cooper & Anderson, 1982). Despite such anxiety, police officers tend not to seek the support of other officers, including more senior colleagues (Brown et al. 1996). Indeed, they often avoid disclosing their experiences of anxiety as they wish to avoid the negative stigma associated with mental health disorders (Hinshaw & Cicchetti, 2000; Hart et al., 1995; Stenger & Roulet, 2018). This reflects wider societal beliefs that individuals with mental health disorders can sometimes be dangerous or incompetent (Wahl, 2003),
among many other negative perceptions, which often lead to various forms of employment discrimination (Stuart, 2006) that hinder career development.

These experiences of anxiety can be aggravated by a lack of consultation and communication (Brown et al. 1996), poor supervision (Brooks & Piquero, 1998), and lack of organizational support (Anshel, 2000). Brough and Frame (2004) showed that supervisor and colleague interactions had a positive impact on police officers’ well-being, particularly in terms of job turnover. Yet there appear to be virtually no studies that examine how and why formal mentoring relationships may influence the experience of anxiety in anxiety-prone professions such as policing.

**Mental health benefits for mentees and mentors**

Drawing together our prior reviews of the literature, in this section we hypothesise that mentoring relationships can provide an organizational mechanism to reduce police officers’ anxiety. As we have outlined, there are a range of arguments suggesting a positive impact of mentoring on mental health for mentees that may also be applicable for mentors.

Mentees in the police force are exposed to high levels of anxiety as they are still at the early stage of their learning curve while working long hours, often without adequate resources (Cooper & Anderson, 1982). Extant research suggests that mentees’ mental health will benefit from mentoring (Eby et al., 2008) as mentors can support them with these challenges. Mentoring positively supports mentees’ affective well-being and prepares them to face stressful and anxiety-provoking situations (Chun et al., 2012). Career-related support includes coaching (Baranik et al., 2010) that can contribute to helping mentees deal with difficult and stressful situations and to making work more satisfying (Scandura & Williams, 2004). In times of stress, or
when reflecting on times of stress, mentors provide useful advice and counselling on both personal and career-related aspects of the job (Kram, 1985), thus reducing mentees’ anxiety. The psychosocial support of engaged mentors can boost mentees’ self-perceptions of competence, effectiveness, and self-worth (Day & Allen, 2004), again helping mentees to react more positively to their work environment and face the causes of anxiety (Chun et al., 2012).

We contend that these benefits are likely to be particularly apparent for police officers, given that they rarely make their anxiety and stress issues public (Carlan & Nored, 2004). As such, the trust built through the mentoring relationship (Young & Perrewe, 2000) can provide a unique opportunity for senior and junior officers to receive support. Thus we hypothesise that the police officers who participate in mentoring programmes as mentees will enjoy a reduced level of anxiety.

**Hypothesis 1:** Mentees who participate in a mentoring programme will experience less anxiety than their peers who are not mentees.

Although there is significantly less research to demonstrate a link between mentoring and mentors’ mental health, the extant literature appears to suggest a positive relationship. There are a number of benefits that mentees enjoy that we can expect to be shared by mentors (Ragins & Scandura, 1999). For example, both mentors and mentees can enjoy a self-confidence boost and perceive themselves as more competent (Kram, 1985) as they can both learn from one another. Mentoring may improve well-being for mentors and mentees by triggering their vocational self-concept crystallisation, which describes enhancing the degree to which a person can match their vocational attitudes, beliefs, and values to the features of their work (Weng & McElroy, 2010). These values are clarified through social interaction. While
this can be useful to mentees to develop a better sense of their adequacy with regards to their work, it may also serve to realign or recalibrate mentors’ attitudes more closely to their work (Ragins & Scandura, 1999). Thus, we expect police officers engaged in a mentoring programme as mentors to feel more confident and more competent about the way they carry out their tasks.

However, mentors as more senior officers experience different sources of stress and anxiety and in this sense might benefit from mentoring in different ways. More senior officers are often stressed by the maintenance of good relationships with the community and the public recognition of policing (Cooper & Anderson, 1982). Mentors’ are likely to experience self-enhancement as they feel as if they are bettering themselves by mentoring and sharing their knowledge. They may also experience self-gratification as they experience satisfaction and pride when mentoring through mentoring more junior colleagues (Allen, 2003). Self-enhancement is an extrinsically oriented career-related motive while self-gratification is anchored in the psychosocial implications of mentoring (Allen, 2007). Concretely, mentors feel validated and useful to someone else, which makes them more secure in the workplace and allows them to experience their work as more meaningful.

Researchers have explored career outcomes and noted that mentors derive satisfaction from encounters with their mentees, which can enable them to be more committed to work and perform better (Wanberg et al., 2006; Lentz & Allen, 2009). We contend that this is due to gratification but also potentially to the fact that mentees might bring positive perspectives and insights to their mentors or make them reflect on their own experience. Mentors’ ability to solve problems can benefit from those reflective discussions with more junior colleagues who might have “a different way of doing things.” In this way, providing support can prove beneficial in itself (Brown et
al., 2003). In addition, providing help to others as part of a mentoring programme triggers a positive impact on well-being (Chun et al., 2012; Mullen, 1994) because of the positive emotions generated by the satisfaction of altruistic motives. Building on this argument, this study hypothesises that mentoring programmes are likely to have a positive effect on the anxiety levels of police mentors.

**Hypothesis 2:** Mentors who participate in a mentoring programme will experience less anxiety than their peers who are not acting as mentors.

While the extant literature suggests that mentors would be likely to reduce their anxiety through mentoring, it is important to explore the mechanisms that may be at play in this process. While a hypothetico-deductive approach will help us examine our hypotheses because the potential explanations presented above are by nature speculative, we also need to inductively enrich and expand on the reasons why mentors may experience a reduction in anxiety. In particular, qualitative data can help us understand how the processes that reduce mentors’ anxieties may differ from those of mentees. Our mixed-method approach, combining quantitative testing of our hypotheses, and a qualitative exploration of the underlying mechanisms, will help us build a more refined theoretical explanation that examines the relationship between mentoring and anxiety.

**EMPIRICAL APPROACH AND RESULTS**

To examine our proposition that police officers experience less anxiety when they participate in a mentoring programme, we opted for an abductive empirical approach that lends itself to mixed-methods research (Wheeldon, & Åhlberg, 2012). Thus, our empirical exploration of the effect of mentoring on the anxiety levels of police...
officers is two-fold. As a first step, we test our baseline hypothesis through the deductive approach of an exploratory field experiment. Then we use an extensive qualitative study with mentor-mentee dyads to inductively reveal police officers’ experiences that refine our understanding of the effect of mentoring beyond quantification. This helps the study to develop a nuanced understanding of anxiety (Schonfeld & Mazzola, 2015) by establishing both a relationship between concepts and the reasons for this relationship as per other mixed-methods studies (Adamson et al., 2009; Onwuegbuzie, 1997).

The exploratory field experiment utilised survey questions across participants in a mentoring programme and a control group, collecting responses at three different points over eight months. Our longitudinal design serves largely to control for time-related contextual factors. The qualitative phenomenological study entailed interviewing mentors and mentees across nine dyads at three different points in time over nine months. We conducted interviews with mentors and mentees separately. The experiment and phenomenological study utilised different cohorts in the mentoring programme (the qualitative study collected data on a 2013 cohort, while the field experiment was conducted for the 2014 cohort). The use of different cohorts ensured that the interviews did not inadvertently shape the participants’ survey responses or vice versa. Ethical approval for these studies was obtained from the ethics committee of the first author’s organization affiliation. All of the participating police officers provided informed consent (Roulet et al., 2017) to participate in the research and will remain anonymous.

*Study context*
Our study examined a mentoring programme that operated in one of 43 territorially based police forces in England and Wales. This mentoring programme was launched in 2013 and incorporated a new cohort of mentors and mentees each year. This mentoring programme was voluntarily in nature, as all of the participants elected to participate by contacting the programme coordinator (a senior police officer) and asking to join. All of the potential mentors were asked for their areas of expertise, and all of the potential mentees for the areas in which they wanted to make progress. Then, depending on their answers, their level of seniority, and their departments, the coordinator in charge of the programme matched each potential mentor with a potential mentee.

This formal mentoring programme consisted of a one-day mentor-mentee orientation before the matching of the dyads. The first author observed this orientation. The orientation was aimed at explaining the objectives of the mentoring programmes and stressing that the success of the relationship hinged on the effort of the mentors and mentees. The programme recommended that the participants meet a minimum of two times every three months and, in fact, participants engaged very quickly with the process and started meeting at a very early stage. In this one-day orientation provided for the participants, no explicit reference was made to mental health or anxiety, although it was stated that the mentors and mentees may enjoy the process and learn from one another.

**Study 1: Exploratory field experiment**

*Data collection and empirical design:* We designed a longitudinal field experiment to run from the initiation of one cohort’s mentoring programme. The programme coordinator matched each potential mentor with a potential mentee based on the
functions of the individuals (constable, sergeant, inspector, and whether they had detective duties), including different experiences. Then each dyad was randomly assigned to the treatment and control groups. The treatment group was the actual participation in the mentoring programme. This was an important point of difference from traditional mentoring quasi-experiments (Siebert, 1999), as our assignment of the subjects was random: the participants in the mentoring programme were not more or less motivated than the participants in the control group. The participants in the control group were informed by the programme coordinator that they would not be participating as mentees or mentors although they would likely be involved in the next mentoring cohort to motivate them to participate in the experiment. The control group members were invited to complete survey questions at exactly the same points in time as the treatment group. When completing the surveys, the members of the control groups were asked to complete their answers where appropriate and that they would provide a point of comparison.

The small sample makes it difficult to have perfectly similar treatment and control groups. The descriptive statistics in Table 1 show the small variations that existed between the two groups. Using a field experiment design enabled us to rule out the causality issues related to the investigation of the impact of mentoring on mentor outcomes. Previous studies were unable to rigorously establish whether having healthier and more successful mentors is a consequence of the mentoring programme or the result of self-selection (Chun et al., 2009). Our use of a carefully designed control group enabled us to rule out many contextual factors that might have affected all of the police officers during the experiment and were exogenous to the experimental treatment.
The novelty of our data compared to previous mentoring studies (see Eby et al., 2008) lies in our collection of observations at the dyad level (from both the mentors and mentees) at three points in time (at the start of the mentoring programme after the first couple of meetings, 4 months later, and 8 months later) for both the treatment and control group. We did not collect data longitudinally to identify dynamics in the evolution of mental health throughout the mentoring process but rather to limit the effect of temporal contextual context on our findings (for example, busier periods, exogenous events, and changes in practice). We expected the participants in the mentoring programme to begin experiencing benefits from the process as soon as the point of our first data collection as they had already met their mentors at that time.

One of the challenges of field experiments is in the data-collection process, especially when the subjects are voluntarily participating and there is likely to be a loss of participants over time. This creates an additional difficulty to collect survey results from the control group as they have no incentive to answer the survey and are unlikely to benefit from the mentoring programme. This results in a loss of control group participants over time. We followed-up with the respondents via email, in person, and via our gatekeeper who coordinated the mentoring programme. We originally had 23 dyads in each of the treatment and control groups, but 21 dyads in each of the group only provided a complete set of data in at least one of the three periods. 17 dyads took the survey in the treatment group at time $t_1$, 16 at time $t_2$, and 14 at time $t_3$. By comparison, we had 18 dyads in the data in the control group at time $t_1$, 11 at time $t_2$, and 10 at time $t_3$. Some of the dyads that provided us with data in $t_2$ and $t_3$ did not complete the survey in $t_1$. Overall, there is a decreasing number of participating dyads because of the difficulties to get participants committed to the
study in the context of a field experiment, especially in a field such as policing in which the participants were likely to be taken away by urgent tasks. We recognised early on that the limited scale of the programme would be a limitation, as only a small number of dyads would participate in the first few years of the police mentoring trial. As a consequence, the results obtained would be provisional but would provide a focus for further investigation.

Although the programme called for the participants to meet a minimum of two times every three months, the mentees reported meeting on average 2.60 formal times during the first four months, while the mentors reported 2.88 meetings (the maximum reported was 6). For the first wave we collected the data using hard copies of the survey that the mentors and mentees completed at the mentoring orientation meeting. The second wave of data was collected 4 months later by directly emailing a link to the survey to the participating mentors and mentees. We used a similar email and online survey approach for the third wave, 8 months after the first orientation.

A focus of this experiment was to explore the effects of mentoring on anxiety. To measure anxiety, we used the short form of the Spielberger State-Trait Anxiety Inventory (STAIT) (Marteau & Bekker, 1992). This seven-item version (with a four-point Likert scale) is as valid and robust as the longer form, while at the same time ensuring that the surveys are short enough so that the respondents are not deterred from finishing the questionnaire. Short rather than long surveys are more likely to receive a good response rate (Sheehan, 2001). The higher individuals scored on the STAIT, the higher their anxiety levels. We computed Cronbach’s alphas for the anxiety levels of the mentors and mentees and they showed high reliability with an alpha above 0.85. We produced a summative scale of the individual item scores.
To better understand the mechanisms at stake, we also examined whether participation in the mentoring programme had a positive effect on psychological empowerment (Table 3) using the survey instrument developed by Spreitzer (1995). This instrument includes 12 items (with a 5-point Likert scale) in four categories of three questions: meaning, competence, self-determination, and impact. The higher the scores, the more the mentors and mentees feel empowered. Cronbach’s alphas for psychological empowerment of both the mentors and mentees also showed high reliability with an alpha above 0.85. We also ran analyses using the four components of psychological empowerment as dependent variables to have a more fine-grained understanding of the impact of mentoring programmes on different facets of empowerment. Cronbach’s alphas for those four components for both the mentors and mentees were all above 0.85, except for the competence component of both the mentees (alpha = 0.79) and the mentors (alpha = 0.81).

To examine our hypotheses that mentoring reduced the anxiety of both the mentors and mentees, we conducted repeated-measures ANOVA, with the dyads as our between-subjects error term (Tables 2 and 3).

In addition to psychological empowerment, we collected a number of other variables via our survey instruments. These include the responses of the mentees and mentors in both the treatment and control groups who received the surveys at the same points in time. We employed the mentoring function questionnaire MFQ9 adapted for mentors (Scandura & Ragins, 1993; validated by Castro et al., 2004), 2 questions on their motivation to participate in the mentoring programme, and 3 questions on the mentors’ psychological proximity toward the mentee (also adapted from MFQ9).
Some of those questions were adapted depending on the phases. For example, in phase 1, the participants had not yet started the mentoring programme, so the questions reflected their expectations rather than their experiences. We also captured a number of demographics for the both mentees and mentors (age, gender, tenure in the police, and tenure in a role). For the treatment group, we also had the number of formal and informal meetings and a rating by the participants of their frequency of interaction with their mentees and mentors. We included the questionnaire we used for the mentors in the treatment group in the appendix as a matter of illustration. The control group participants received instructions on the surveys to answer the questions relevant to them, ignoring those that they could not answer such as those that pertained to the mentoring relationship.

Analysis and findings: Table 1 provides a number of descriptive statistics on the mentors and mentees in the treatment and control groups. The mentors in our sample were more likely to be male. As expected, on average the mentors had longer tenures as police than the mentees. Finally, the mentors in the treatment group were older than the mentees on average. This does not mean that some mentees were older than their mentors: this gap was rather due to the high standard deviation in the ages of the mentees.

To examine our hypotheses that mentoring reduces anxiety and increases psychological empowerment for both mentors and mentees, we conducted a repeated-measures ANOVA with the dyads as our between-subjects error term. Our findings regarding the impact of the mentoring programme on anxiety are reported in Table 2. Our results suggest that being a mentor is associated with a lower anxiety level:
although small, the difference in anxiety for actual mentors (M = 1.23, SD = 0.37) and for potential mentors (M = 1.26, SD = 0.45) was significant at the p < 0.05 level (F(1,42) = 5.07). This small difference in the mean anxiety between treatment and control groups, despite being significant, is explained by the fact that our design accounts for repeated measures. Overall there was a significant difference between the mentors’ anxiety in the treatment vs the control group in each period, although when the three periods were averaged, the difference was small. The adjusted R-squared for this model was 0.68. However, we did not find any significant association between the anxiety level of the actual mentees and the potential mentees (p = 0.55; F (1,42) = 0.37). The adjusted R-squared for this model was 0.70. We expected the mentors and mentees to benefit from the programme early on and we did not expect the benefits to clearly unfold with time, but we also tested the interactions effect between the treatment and the period without finding any significant results.

*Insert table 2 about here*

Our findings regarding the impact of the mentoring programme on psychological empowerment are reported in Table 3. The results are non-significant unless we split psychological empowerment into its four components: meaning, competence, self-determination, and impact. We found that when the mentors participated in the mentoring programme, they seemed to find their jobs more meaningful (M = 4.62 for the actual mentors vs 4.10 for the potential mentors, F(1,42) = 7.74, p < 0.01). The adjusted R-squared for this model was 0.17. Although these results are only marginally significant, the mentees appeared to feel less competent when they participated in the programme (M = 3.76 for the actual mentees vs 4.18 for the potential mentees, F(1,42) = 3.58, p = 0.065, adjusted R-squared = 0.55 for this model) but they felt that they had more self-determination, autonomy, and
independence (M = 3.81 vs 3.76, F(1,42) = 3.44, p = 0.071, adjusted R-squared = 0.65 for this model).

Insert Table 3 about here

Two empirical elements emerged from our field experiment. First, the participants reported a surprisingly low level of anxiety (on average less than 2 on a 4-point scale). One interpretation is that police officers know how detrimental it could be for them to reveal their anxiety and thus they seek to minimise their reported anxiety levels despite assurances of anonymity. This under-reporting casts doubt on the validity of the survey instruments to capture anxiety. Second, this exploratory field experiment found the most significant effects on mentors although they remained marginal and limited. The mentors seemed to experience slightly lower levels of anxiety when averaged over the three periods but also felt as if their job was more meaningful when they participated in the mentoring programme. These results suggest that the mentors benefitted from having a mentee as this makes them less likely to experience anxiety and makes their job more rewarding. Those two effects may be related, as we stressed that meaningfulness at work can positively affect stress at work. To further explore these findings, we turn to the qualitative element of our study. The objective of this qualitative study was to dig deeper into the mechanisms that explain the pattern between mentoring and mentors’ experiences of anxiety.

Study 2: Qualitative phenomenological study

To complement and clarify the limited findings from the exploratory field experiment, we employed a phenomenological approach to elicit the experiences of the police officers participating in the mentoring scheme (Gill, 2014). Scholars of mentoring have employed phenomenological approaches to examine individuals’ experiences
and to inductively establish commonalities or themes across these experiences (Kram & Isabella, 1985; Roberts, 2000). Similarly, phenomenology has been utilised to understand experiences of anxiety (Gill, 2015). Phenomenological research methodologies explored the participants’ lived experiences from their own descriptions and perspectives (Eatough & Smith, 2006) and rely on in-depth interviews in a semi-structured form. Unlike quantitative approaches, such as field experiments, the emphasis in phenomenological inquiry is on developing sufficiently rich data in contrast to adequate numbers of participants.

**Data collection and empirical design:** In line with our field experiment, our qualitative data collection focused on the individuals participating in the police mentoring programme. We interviewed the mentors and mentees separately across nine mentoring dyads (18 participants). These interviews took place approximately in the first, third, and ninth months of their relationships, which generated 35 formal interviews and 840 minutes of recordings. We also used notes when some participants did not wish to be recorded but were happy to participate in the research. We interviewed the mentors and mentees within each of the nine dyads separately about their mentoring relationships. These interviews were either face-to-face at one of two different police stations or over the telephone.

An important feature of the qualitative data collection was the initial use of informal interviews. In the first wave of qualitative data collection, the first author spoke with each mentor and mentee separately (17 participants as one did not respond). This was to introduce the research project to each participant, thereby allowing us to receive their informed consent. Following this introduction, the first author talked with the officers and, in agreement with the request of various
gatekeepers and stakeholders, used these discussions as informal interviews that were not recorded. This afforded the officers an opportunity to continue to participate with an accurate appreciation of what would happen in such interviews going forward. Although we do not count these as formal interviews, they did, however, help to shape our subsequent interview questions and, we believe, to build trust and good faith in the research project.

Akin to our survey results, there was a decline in participation over the course of the next two formal interview stages. At 3 months, 9 mentors and 8 mentees participated in formal interviews. At 9 months, 7 mentors and 5 mentees participated in formal interviews. There were an additional 6 follow-up interviews with officers who had their interviews cut short due to urgent requests on their time.

Semi-structured interviews provided the participants with an opportunity to explore their experiences (Rubin & Rubin, 1995) and to describe these in their own words and on their own terms. Our interviews examined each mentor and mentee’s relationship with one another and explored the effect of their interactions. For example, the interview schedule asked both the mentor and mentee for examples of advice or knowledge that they had provided or received from their counterpart. Follow-up interview questions then probed each individual’s perception of the value of this knowledge by asking how helpful they had found the advice. Semi-structured interviews afforded considerable flexibility in this process, allowing the researchers to explore topics in more depth when raised by the participants. For instance, as anxiety emerged across multiple participants as a theme of their experiences in early interviews, this topic became more of a focal point of discussion in relation to the mentoring programme. All formal and recorded interviews were transcribed for analysis.
**Analysis:** We adopted an interpretative phenomenological analysis (IPA) approach to analyse the interview data (Smith, Flowers, & Larkin, 2009). As such, we followed Smith and Osborne (2008) who outlined four key stages of inductive analysis. First, we read one transcript closely for familiarity and then looked for emerging themes, annotating significant points. Second, we clustered together connected or related themes to create master (superordinate or overarching) themes. Third, we used the emergent themes from the first transcript to orient the analysis of subsequent transcripts in an iterative fashion. Once each transcript had been analysed, we developed a final table of superordinate themes to establish significant themes across the participants. Fourth, the outcome of the analytical process is a narrative account where “the researcher’s analytic interpretation is presented in detail with verbatim extracts from participants” (Smith et al., 2009, p. 4).

We present this narrative account in the following findings section, employing the participants’ accounts as a powerful way of illuminating and explaining the quantitative results that emerged from the earlier field experiment. Given space limitations, we focus on the participants’ shared experiences rather than exploring the differences between each mentoring dyad. It is important to note, therefore, that different mentoring dyads realised different benefits from their interactions. Nonetheless, the commonalities that we establish through this phenomenological analysis serve to deepen our understanding of the field experiment and allow us to clarify the theoretical and empirical relationship between mentoring and anxiety.

A significant finding that emerged in later parts of the study, somewhat contradicting the data collected during the field experiment, was that the police officers appeared to endure significant amounts of anxiety and stress. Almost all of
the officers disclosed feeling immense pressure to perform to particular standards in a challenging line of work. Several accounts highlighted the officers’ difficulties in working with criminals and their victims that often appeared to elicit emotional problems. A further, more significant pressure appeared to be the officers’ experience of increasing managerial demands on their time. A majority of the interviewed officers stated that the breadth of tasks assigned to their respective ranks had increased, calling for them to do more in less time and with less support. This included a large administrative burden that came from monitoring and measuring their performance against objectives. In particular, the participants felt ill-equipped to manage their new managerial requirements. Many officers feared failing to meet the prescribed standards of performance, as this could hinder their opportunities for promotion or limit their opportunities to pursue their preferred type of policing work. In this way, both the practical and managerial aspects of policing appeared to prompt significant feelings of anxiety.

In focusing more specifically on the relationship between mentoring and anxiety, our study established three main themes or commonalities across many but not all of the participants’ accounts that related to the positive effects of mentoring on anxiety. First, mentoring provided a unique context or space for the discussion of personal anxieties or concerns. Second, mentoring provided a source of counselling content, where officers could share ideas or techniques to manage the pressures on their mental health. Third, mentoring, in and of itself, could make the mentors’ work more meaningful. These themes became more prominent over the duration of the mentoring relationships, as the mentors and mentees generated the rapport and trust necessary to share their experiences. Our qualitative data point to the intrinsic reward mentors receive from the mentoring activity and how it makes their daily job more
meaningful. The following paragraphs explore each of these themes in turn, drawing on select quotes from the participants that illuminate and substantiate these findings.

The first theme of mentoring as a unique context reflects both the mentors and mentees’ descriptions of their busy and often frantic working lives, where little time is available for reflection. For the participants in this study, a mentoring programme provided and justified a unique opportunity to meet and converse with other officers. Several participants noted that it was helpful to have dedicated time to talk. For both the mentors and mentees who had discussed stress and anxiety, mentoring appeared to provide a real benefit. In the case of one mentee who had failed to meet some of their recent performance expectation, mentoring provided much needed support:

“Having someone listen to you. That’s worth a lot. It got me back on track.”

(Mentee, dyad 9)

In this way, mentoring offered new opportunities for the participants to disclose or share experiences, which are rarely available. Talking with fellow police officers appeared to be especially beneficial as they “got it” (mentee 1), meaning that they understood the unique experiences of the occupation and could relate to these experiences. The mentoring relationship appeared to help to elicit experiences and also to discuss and examine these experiences.

It is important to emphasise that several mentors, and not just mentees, described the benefits of having an opportunity to be “listened to.” Several mentees recognised that their mentoring relationships were therefore reciprocal in nature:
“It’s definitely a two-way street. I didn’t think it would be at the start but you tell them things they didn’t know. [...] and realise [mentor 2] doesn’t get many chances to talk about his stuff, you know, his thinking. Who can he talk to?”

(Mentee, dyad 2)

Indeed, the mentors also acknowledged these benefits, showing how the experience of mentoring was intrinsically rewarding and gave meaning to their work:

“You’re not just giving your time, you’re getting something back. As well...it’s a welcome break from everything else.”

(Mentor, dyad 2)

“The...higher up...senior...you move, the less you talk with people like [mentee] and you don’t have as many people you can talk [to]. It’s a shame.”

(Mentor, dyad 4)

It seems reasonable to believe that a context for listening and reflecting would be of particular value to senior officers who tend to act as mentors to more junior officers. This is because senior officers tend to have far greater demands on their time and a smaller pool of peers to draw on for support than that of their junior colleagues. Thus, mentoring can provide a rare opportunity to discuss and share experiences.

The second theme that emerged through our qualitative study was mentoring as a source of counselling content. This captured the mentors and mentees’ descriptions of their interactions as providing ideas or practises to help one another
manage their anxieties. Several of the participants described how their mentors provided advice or guidance, often practical in nature, to manage their work-life balance. For example, some mentees outlined their experience of stress and described how it interfered with their personal lives. One participant noted how their anxieties often followed them home, so that rather than spending time with their family, they would be worrying about their work. In these cases, the mentors drew on their experience to provide coping skills. As one of these mentors explained:

“We’ve all been there, when it gets tough. We’ve all gone through it. So when [my mentee] talked about the difficulties they were having, I told them the things I learned. It sounds simple but switch your BlackBerry off. Put it in a drawer. Spend time with your family. It’s hard to believe but the world won’t end if you’re not there.”

(Mentor, dyad 9)

This quote illustrates the guidance that the mentors often provided to their mentees. For the police offers in this study, such advice was valuable as it provided practical support for the increasing managerial responsibilities of their work, where they received little guidance. While many of the mentees did report that they found such advice helpful, these ideas also served to support the mentors in managing their own anxieties. For instance, as the aforementioned quote indicates, the mentees’ disclosure of their own difficulties and issues helped the mentors to reaffirm or recognise that they were not the only ones who struggled and that “we’ve all gone through it.” Another mentor also noted that such discussions helped to serve as a “reminder:”
“Everyone...well a lot seem to worry. You always think they do but when they talk it’s obvious. It’s good for them, a reminder for me, to know that we all do. Then you can start working out what to do about it.”

(Mentor, dyad 5)

In this way, mentoring provided reassurance to the mentors by illuminating how other, often junior officers also experience anxiety thereby normalising their own experiences. By acknowledging that anxieties are common, both the mentees and mentors in this study appeared to be more comfortable discussing such issues and therefore in developing different coping mechanisms.

A third theme that emerged was the idea that mentoring provided a meaningful activity for mentors. Many of the senior officers described themselves as separated from the daily police work of their junior colleagues. Often long-term project management and meetings prevented them from doing what they described as “real policing.” This meant that their impact across a range of stakeholders was hard to discern. In contrast, they could witness more direct and immediate results by helping the junior officers or staff they valued through mentoring.

“Doing this [mentoring] lets you do something important for someone and see the results fairly quick. You are helping them. They don’t always listen but it is satisfying. More than a lot of what I have to do these days.”

(Mentor, dyad 2)
“It [the mentoring programme] matters. I think we should all be doing something like this. You have experiences that you can pass on that make a real difference so it is important that we do. How else can we do it? It takes years to learn.”

(Mentor, dyad 7)

As described earlier, the mentors viewed mentoring as a source of satisfaction but also as a responsibility that was meaningful. This importance and meaning appeared to stem from the scarcity of others who could help and support more junior officers. The mentoring process also served to make the knowledge and skills that many of the mentors in this study had acquired over time valuable, as it could be passed on and used by others. As mentor 4 reflected “[i]t helps to make you realise what you’ve learned over your career and a lot of the success and growth you take for granted.”

Discussion

This study points to the existence of mental health benefits from mentoring programmes in the socially important profession of policing. Our quantitative results suggest that mentors are more likely to experience a reduction in anxiety compared to a treatment group not participating in the mentoring programme. Although the results should be treated with caution, it seems that the mentors felt as though their jobs were more meaningful when they provided mentoring. These results also revealed that the mentees felt less competent but had more control over their jobs when being mentored. The low level of anxiety reported by the participants and the limited strength of the findings, however, encourage further research.
We wanted to build a fine-grained understanding of how mentors and mentees experienced their daily work and how the mentoring programme could help them to manage the challenges involved in policing. Our qualitative findings help us focus on the lived experience of our participants. These results clarify that mentoring can provide busy senior officers the time to reflect on issues of anxiety. It can also widen the typically small pool of colleagues with whom senior officers or mentors can share their experiences. Mentoring, in many cases, also provided the mentors with a sense that their work was more meaningful. Our interviews suggest that this is because mentoring provided mechanisms through which the mentors, as more senior officers, could impart their insights and share their experiences with more junior officers. By providing help directly to an individual, mentors often had an opportunity over the course of a mentoring relationship to see, sometimes quite quickly, how their advice had made a positive difference. Many mentors then recognised the value of their own personal experiences when they could share them. It seems reasonable to believe, then, that a context for listening and reflecting as afforded by mentoring would be of particular value to senior officers and yield intrinsic rewards.

A main contribution of our study is therefore to more broadly demonstrate the impact of a mentoring programme on mentors’ well-being, particularly in terms of anxiety, which is an underdeveloped area of research (Chun et al., 2012). Beyond the cost-benefit analysis of being a mentor (Ragins & Scandura, 1999), we showed that mentoring has holistic consequences with benefits that are not necessarily identifiable ex ante by the mentor. More specifically, our study helps to illuminate the reasons why some mentors may experience reduced anxieties due to the opportunities mentoring provides to share and normalise troubling experiences. These results partially substantiate Kram’s (1988) theorisation that mentoring provides both
mentors and mentees with a self-confidence boost and an opportunity to perceive themselves as useful to their peers.

Our results also suggest that many of the psychosocial benefits of mentoring for mentees may also extend to mentors themselves. Fowler and O’Gorman (2005) noted that mentors offer mentees counselling and friendship, which provides mentees with an increased sense of competence. Furthermore, many of the mentors in this study appeared to learn or gain new insights into themselves largely through reflecting on past experiences. While the focus of this learning may not be the same for mentees, who typically “learn the ropes” (Kram, 1983, p. 609), both mentors and mentees appeared to acquire new knowledge. The mentoring relationship, if not the mentees, appeared to provide similar benefits to the mentors in this study.

The findings from this study also corroborate Brough and Frame’s (2004) research that demonstrated that supervisor and colleague interactions had a positive impact on the police officers’ well-being. Mentoring relationships appeared to provide an organizational mechanism to prompt supervisor and colleague interactions, which in turn facilitated a reduction in the mentors’ anxiety. Our study unveiled the ways that mentoring provides meaning and confidence to the mentors.

Our abductive approach led us to design a mixed-method study in an attempt to transcend the sole quantification of the effect of mentoring. The contrast between our limited quantitative results and the insights provided by our qualitative study deserves further comment. While the quantitative findings unearthed limited conclusions, our phenomenological study posits that much more is happening and suggests that further qualitative research could be useful to extend research on mentoring. For instance phenomenologically flavoured ethnographic approaches may be helpful in building further insights into the experiences of mentors and mentees that cannot be captured
in interviews (Vom Lehn, Forthcoming). Given the stigma or taboo surrounded issues such as anxiety (Hinshaw and Cicchetti, 2000), future research requires deeper rapport with the participants than a field experiment or survey provides.

**Practical implications**

The English and Welsh police have faced increasing pressure to become more efficient, prompting greater anxieties within an occupation that already endures significant challenges (Brown et al., 1996). This managerial approach to police performance has placed more pressure on police officers to expand their policing duties. A focus on efficiency, however, may also serve to legitimise new practises that originate from the private sector, such as formal mentoring programmes. The issues of stress and anxiety are increasingly recognised within the police forces, but further acknowledgement and specific attention are needed (Brown et al., 1996).

Our exploratory study suggests that there is potential for the police implementing mentoring programmes to reduce anxiety. Furthermore, it is important for organizations that seek to employ mentoring programmes to recognise that both the mentor and mentee may benefit from the relationship and therefore not to focus purely on mentee outcomes. We urge caution, however, as while mentoring relationships offer many benefits to individuals, “the range of factors that can affect the relationship – either positively or negatively – is vast” (Morgan & Davidson, 2008, p. 126). As such, there should be no assumption that mentoring will benefit all mentors or mentees. In addition, in monitoring a mentoring programme, the issues of capturing anxiety because of its stigma require careful consideration. Organizations might prefer to opt for interviews or close observation to capture the sources and nature of anxieties at work.
Strengths and limitations

An English police force provides a novel and relevant setting for exploring how mentoring may affect anxiety-prone employees. The longitudinal feature of both our qualitative and quantitative investigations enables us to unveil the dynamics of the mentoring process. For instance, the mentors and mentees’ discussions of anxiety appeared to occur gradually over time as they developed the rapport and trust necessary to share their experiences. This is a particularly salient point given the stigma that surrounds mental health issues (Hinshaw and Cicchetti, 2000; Hart et al., 1995), as several participants in this study acknowledged.

The study’s quantitative results, however, are limited in a number of ways. First, our experiment yielded very limited results that should be taken with caution. We did not find strong evidence of an effect of mentoring programmes on anxiety. This is partly explained by the fact the field experiment was limited in scale and in the number of observations. We relied on a small-scale programme to explore and test the potential of mentoring in the police force. The small scale reflects the challenges of pursuing a field experiment. Another empirical issue is that the police officers’ voluntarily reported low levels of anxiety (Hart, Wearing, & Headey 1995). In line with other occupations (Gill, 2015), it seems that police officers tend to hide their anxieties because they believe that it can hamper the way their peers perceive their suitability for work (Carlan & Nored, 2008). Indeed, we observed that our participants reported a surprisingly low and thus probably non-representative level of stress when answering the surveys despite the fact that we guaranteed anonymity. Nonetheless, the qualitative findings suggest that mentoring reduced experiences of anxiety for many police officers. Given the exploratory nature of our research and its focus on a
unique occupation, it is important not to generalise the value of mentoring for managing anxiety to other settings without further research.

**Future research**

Future research could design larger-scale field experiments and more closely examine the mediating variables between participating in a mentoring programme and mental health. As we suggested, participating in a mentoring programme might, for example, increase self-confidence (the perception of one’s own competence) and psychological empowerment (Chung & Kowalski, 2012). Another topic of interest is to examine more closely how mentors and mentees interact (Brough & Frame, 2004), especially through common activities (Caddick et al., 2015), and how this may play a role in the reduction of their anxiety levels but also in how it generates meaning at work.

Future research could assess the role of mentoring programmes in other anxiety- or stress-prone occupations. For instance, socialising has been shown to positively affect army officers’ mental health (Hatch et al., 2013), and future research could also examine firefighters (Alexander & Walker, 1994) or entrepreneurs (Schonfeld & Mazzola, 2015). Recent research suggests that individuals can self-select into some working contexts depending on their mental health (Dawson et al., 2015). It would therefore be interesting to examine whether individuals who are naturally resistant to anxiety are more likely to enter anxiety-prone occupations than those with average responses to anxiety.

**Conclusion**

While police officers are likely to experience work-related anxieties, these experiences often remain undisclosed or unaddressed. In this context, providing
assistance may be difficult. Formal mentoring programmes can help to address this problem. Our study identified several benefits relating to mentoring programmes, showing in particular a positive impact on the mentors’ levels of anxiety. We suggest that this occurs as mentoring provides a unique context for officers to discuss and normalise their concerns and to share ideas for managing anxieties. In a context of increasing pressures on law enforcement services, relatively inexpensive organizational practices such as mentoring can play a critical role in supporting police officers and therefore the wider society that they protect.
References


Taussig, Heather N., & Sara E. Culhane (2010). Impact of a mentoring and skills group program on mental health outcomes for maltreated children in foster care. *Archives of pediatrics & adolescent medicine* 164.8: 739-746.


# Tables

## Table 1 – Descriptive statistics: means and standard deviations

<table>
<thead>
<tr>
<th></th>
<th>Treatment group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mentors</td>
<td>Mentes</td>
</tr>
<tr>
<td>Age</td>
<td>40.75 (5.85)</td>
<td>40.91 (9.07)</td>
</tr>
<tr>
<td>Male</td>
<td>70.59%</td>
<td>47.82%</td>
</tr>
<tr>
<td>Tenure at the police</td>
<td>13.47 (5.62)</td>
<td>12.75 (7.96)</td>
</tr>
</tbody>
</table>

## Table 2 – Repeated-measure ANOVA results of the association of participating to the mentoring program and anxiety levels

<table>
<thead>
<tr>
<th></th>
<th>Experimental</th>
<th>Control</th>
<th>F (1,42)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>Mentors - Anxiety level</td>
<td>1.23</td>
<td>0.37</td>
<td>1.26</td>
<td>0.45</td>
</tr>
<tr>
<td>Mentees - Anxiety level</td>
<td>1.53</td>
<td>0.48</td>
<td>1.30</td>
<td>0.46</td>
</tr>
</tbody>
</table>

**significant at the p < 0.05 level
Table 3 – Repeated-measure ANOVA results of the association of participating to the mentoring program and psychological empowerment

<table>
<thead>
<tr>
<th></th>
<th>Experimental</th>
<th>Control</th>
<th>F(1,42)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>Mentors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological empowerment</td>
<td>4.31 0.52</td>
<td>3.87 0.47</td>
<td>1.48  0.231</td>
<td></td>
</tr>
<tr>
<td>Meaning</td>
<td>4.62 0.41</td>
<td>4.10 0.86</td>
<td>7.74*** 0.008</td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td>4.18 0.53</td>
<td>4.21 0.60</td>
<td>2.00  0.165</td>
<td></td>
</tr>
<tr>
<td>Self-determination</td>
<td>4.31 0.62</td>
<td>3.74 0.69</td>
<td>0.17  0.684</td>
<td></td>
</tr>
<tr>
<td>Impact</td>
<td>4.17 0.87</td>
<td>3.42 0.82</td>
<td>0.65  0.465</td>
<td></td>
</tr>
<tr>
<td>Mentees</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological empowerment</td>
<td>3.761 0.65</td>
<td>3.763 0.55</td>
<td>0.08  0.780</td>
<td></td>
</tr>
<tr>
<td>Meaning</td>
<td>4.10 0.89</td>
<td>4.24 0.77</td>
<td>0.85  0.361</td>
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</tr>
<tr>
<td>Competence</td>
<td>3.76 0.66</td>
<td>4.18 0.44</td>
<td>3.58*  0.065</td>
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</tr>
<tr>
<td>Self-determination</td>
<td>3.81 0.83</td>
<td>3.76 0.92</td>
<td>3.44*  0.071</td>
<td></td>
</tr>
<tr>
<td>Impact</td>
<td>3.39 1.21</td>
<td>2.87 0.88</td>
<td>0.00  0.959</td>
<td></td>
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</tbody>
</table>

*** significant at the p < 0.01 level
** significant at the p < 0.05 level
* significant at the p < 0.1 level
APPENDIX 1 – Survey for the first phase for mentors in the treatment group

Demographics

Name:*_

Gender*: Male/Female

Role:*_

Date since when being in this current role (approximately):*_

Date since when joining the police force (approximately):*_

Birthdate:*_

Survey questions

Where the following survey questions refer to mentoring, please answer them as if you had been invited to participate in a mentoring program as a mentor (whether or not you are actually taking part in a mentoring program).

1. I think I would be a good mentor.*_

   1 2 3 4 5

   Strongly disagree       Strongly agree

2. I expect to take a personal interest in my mentee’s career *_

   1 2 3 4 5

   Strongly disagree       Strongly agree

3. I expect to help my mentee coordinate professional goals.*_

   1 2 3 4 5

   Strongly disagree       Strongly agree

4. I expect to devote special time and consideration to my mentee’s career.*_

   1 2 3 4 5

   Strongly disagree       Strongly agree

5. I expect my mentee to share personal problems with me.*_

   1 2 3 4 5

   Strongly disagree       Strongly agree

6. I expect my mentee to exchange confidences with me.*

   1 2 3 4 5

   Strongly disagree       Strongly agree
7. I expect my mentee will be able to consider me as a friend.*

1 2 3 4 5

Strongly disagree  Strongly agree

8. I expect to be a role model for my mentee.*

1 2 3 4 5

Strongly disagree  Strongly agree

9. I expect my mentee to admire my ability to motivate others.*

1 2 3 4 5

Strongly disagree  Strongly agree

10. I expect my mentee to respect my ability to teach others.*

1 2 3 4 5

Strongly disagree  Strongly agree

11. I'm highly motivated to participate in the mentoring program.*

1 2 3 4 5

Strongly disagree  Strongly agree

12. I would like to participate in the mentoring program as soon as possible.*

1 2 3 4 5

Strongly disagree  Strongly agree

13. I expect to share personal problems with my mentee.*

1 2 3 4 5

Strongly disagree  Strongly agree

14. I expect to exchange confidences with my mentee.*

1 2 3 4 5

Strongly disagree  Strongly agree

15. I expect I will be able to consider my mentee a friend.*

1 2 3 4 5

Strongly disagree  Strongly agree

**Work-related questions**

16. The work I do is very important to me.*

1 2 3 4 5

Strongly disagree  Strongly agree

17. My job activities are personally meaningful to me.*
<p>| | | | | |</p>
<table>
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<th></th>
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</thead>
<tbody>
<tr>
<td>18. The work I do is meaningful to me. *</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>Strongly agree</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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<tr>
<td>19. I am confident about my ability to do my job.*</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Strongly disagree</td>
<td>Strongly agree</td>
<td></td>
<td></td>
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<tr>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>20. I am self-assured about my capabilities to perform my work activities.*</td>
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<td></td>
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<tr>
<td>Strongly disagree</td>
<td>Strongly agree</td>
<td></td>
<td></td>
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<tr>
<td>1 2 3 4 5</td>
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<tr>
<td>21. I have mastered the skills necessary for my job.*</td>
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<tr>
<td>Strongly disagree</td>
<td>Strongly agree</td>
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<td></td>
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<tr>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>22. I have significant autonomy in determining how I do my job.*</td>
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<tr>
<td>Strongly disagree</td>
<td>Strongly agree</td>
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<tr>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>23. I can decide on my own how to go about doing my work.*</td>
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<tr>
<td>Strongly disagree</td>
<td>Strongly agree</td>
<td></td>
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<td></td>
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<tr>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. I have considerable opportunity for independence and freedom in how I do my job.*</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>Strongly agree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2 3 4 5</td>
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<td>25. My impact on what happens in my department is large.*</td>
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<td>Strongly disagree</td>
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<td>26. I have a great deal of control over what happens in my department.*</td>
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<td>Strongly disagree</td>
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<td>27. I have significant influence over what happens in my department. *</td>
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<td>Strongly disagree</td>
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Over the last two weeks, how often have you been bothered by the following problems? ( 

28. **Feeling nervous, anxious, or on edge** *Not at all/ Several days / More than half the days / Nearly every day

29. **Not being able to sleep or control worrying** *Not at all/ Several days / More than half the days / Nearly every day

30. **Worrying too much about different things** *Not at all/ Several days / More than half the days / Nearly every day

31. **Trouble relaxing** *Not at all/ Several days / More than half the days / Nearly every day

32. **Being so restless that it is hard to sit still** *Not at all/ Several days / More than half the days / Nearly every day

33. **Becoming easily annoyed or irritable** *Not at all/ Several days / More than half the days / Nearly every day

34. **Feeling afraid, as if something awful might happen** *Not at all/ Several days / More than half the days / Nearly every day