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The  
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**Title:** An Examination of the Association Between the Workplace Relationships (Leader-Member Exchange and Workplace Friendship) and Motivation.

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## Abbreviations

<b>LMX</b>	:	Leader-Member Exchange:
<b>WF</b>	:	Workplace Friendship:
<b>MWMS</b>	:	Multidimensional Work Motivational Scale
<b>SPSS</b>	:	Statistical Package for Social Science:
<b>SDT</b>	:	Self-Determination Theory
<b>H</b>	:	Hypothesis



## **Abstract**

The current study was conducted to investigate the connection between workplace relationships (leader-member exchange and workplace friendships) and motivation among employees. Additionally, the dissertation includes an examination of the moderation role of personality features and the level of mindfulness that might influence the connection between workplace relationships and motivation. Social demographic form, Multidimensional Work Motivation Scale (MWMS), Workplace Friendship (WF) questionnaire, Leader-Member Exchange (LMX), BFI-10, the State MAAS questionnaires were used to collect data. According to the findings, LMX and WF predict intrinsic and identified motivation separately. Regarding to the moderating relationships, only conscientiousness was shown to have a moderation effect on the direct relationship between LMX and identified motivation. The results were discussed in accordance with the previous literature and some recommendations were put forward for future research.

**Keywords:** LMX, Self-determined motivation, workplace friendship, mindfulness

## 1. Introduction

Work motivation is “a set of energetic forces that originate both within as well as beyond an individual’s being, to initiate work-related to behaviour, and to determine its form, direction, intensity, and duration” (Pinder, 1998, p.11). Numerous work motivation theories have been suggested by scholars. These include the Need Hierarchy theory, Job Characteristics theory, Self-Determination theory, Procrastination theory, Equity theory and Person-Environment Fit theory (Latham, 2007); however, the existence of a vast range of theories might make the practical implementation more complicated because the perspective of each theory describes distinct factors relating to the motivational process. Nevertheless, the work motivation topics in the literature have always been one of the main issues affecting the success of an organisation (Kanfer, Freese & Johnson, 2017). For example, a recent survey conducted in the UK by Scottish-based Eden Springs showed interesting results: Approximately half of employees rated their motivation below five out of ten. Female counterparts, middle-aged people (35-44), and autonomous people at work felt more motivated (Springs, 2015). This is evidence that organisations still need to utilise motivation theories in order to motivate their employees.

To understand the development of work motivation, and the contribution of the dissertation, we must firstly comprehend the nature of the motivation theories. This introduction represents a review of the work motivation theories through a theoretical perspective and this provides a foundation for the study. The work motivation literature is organised in three clusters by referring to Kanfer, Freese and Johnson’s study (2017). These clusters are the content (e.g. needs, personality), context (e.g. supervisor) and process (e.g. goal choice, self-regulation).

In terms of content, one of the salient theories is the need hierarchy theory (Maslow,1943). This theory assumes that our behaviours are controlled by five diverse hierarchical needs. These are physiological (e.g., nutrients), safety (e.g., house), love-belonging (e.g., friendship), esteem (e.g., victory), and self-actualisation (e.g., self-fulfillment). This hierarchical structure assumes that once the first needs (physiological) and second needs (safety) are met, high-level needs (e.g., love and esteem) become influential. Since the hierarchy of needs has been criticised due to a lack of empirical evidence (Latham, 2007), a similar theory has been developed by McClelland (1961). He ignores the level of a hierarchy and, focuses on more distinct, diverse and clearly described needs such as achievement, affiliation, power and

autonomy. The need of justice is described by Adams (1965), which is also known as Equity theory. According to this theory, employees might compare their inputs (e.g. struggle, effort) and outcomes (e.g. salary) with the inputs and outcomes of their colleagues. If there is an unfairness in the perceived situation, this might result in motivational problems among employees. Thus, content theories have reflected the importance of the human needs. Afterwards, one of the most comprehensive frameworks concerning the human needs, is suggested by Self-determination theory redressed human needs. Concisely, it is interested in how basic needs (autonomy, competence and relatedness) improve performance via intrinsic motivation (Kanfer, Freese and Johnson, 2017). Therefore, this study referred to the Self-Determination theory to explain motivational process regarding workplace relations. The reasons for this will be explained in the following chapters.

Theoreticians have given attention to not only the social needs of humanity but also emphasize differences in motives. Consideration of the five-factor model theory has revitalised interest in the impact of personality on motivation (Kanfer, Freese & Johnson, 2017). For example, Judge and Ilies (2002) conducted a meta-analytic study analysing relationships between personality and motivation and highlighted that conscientiousness, one of the sub-dimensions of personality, has a good correlation with motivation. Schmitt, Cortina, Ingerick and Wiegman (2003) stated in their research that personality factor might be the main predictor of elements of motivation. These studies are more concerned with personality issues to discover motivational processes; therefore, I have decided to put the personality factor (as a moderator) in the study for an explanation of the motivation.

The aforementioned content-oriented theories (e.g. personality, the hierarchy of needs), are different from context-oriented theories because they place more focus on the environment. In other words, contextual variables such as supervisor support and co-worker relations might have a reflective effect on the factor of work motivation (Kanfer, Freese & Johnson, 2017). It is thought that strong contextual impacts might diminish the influence of individual differences. For example, team efficacy (contextual variables) might have a moderator effect on the individual differences in terms of motivation (Chen & Kanfer, 2006). Another theory is cognitive evaluation theory (CET) and is based on the Self Determination Theory (SDT). It is interested in how social context and interpersonal interactions influence the intrinsic motivation. CET is engaged in discovering the impact of feedback, rewards, the pressure in the feeling of autonomy, and competence on motivation. Context-oriented approaches showed that the motivation is not only an issue of autonomy, competence and fairness but also relates to aspects such as supportive supervision or leadership and meaningful work. The importance of

leadership and team domains (e.g. LMX, leadership styles, co-worker or team relationships) are emphasised in the literature (Tse & Dasborough, 2008). Thus, this dissertation specifically aimed at discovering how contextual factors such as leadership and workplace friendship impact the work motivation among employees.

The process-oriented theories have directed their efforts towards the goal choices and goal attainment. For example, the Goal-setting theory assumes that setting specific and challenging goals along with convenient feedback results in higher task performance of employees (Locke & Latham, 1990). Another process-oriented theory is the Expectancy theory which is also known as goal choice of cognitive theories (Kanfer, Freese & Johnson, 2017). According to this theory, the employee motivation depends on their effort expectation which, in turn, results in high performance (Katzell & Thompson, 1990). However, our interest in this process is the Self-regulation theory that is described as the psychological processes by which individuals strive for goal attainment. A recent study found that the self-regulation process might be modulated through mindfulness (Kaunhoven and Dorjee, 2017). This dissertation also aimed at discovering how mindfulness of employees has an impact on the facilitation of work motivation.

As mentioned above, there are diverse work motivation theories, nevertheless, these are not contradictory to each other as each of them focuses on distinct factors of the motivation process. However, the literature lacks an integrative conceptual framework reviewing the interconnection of each theory. Locke and Latham (2004) attempted to tie motivation theories to build an overall comprehensible framework and recommended valid aspects of extant theories. With this need for building a comprehensible holistic framework in mind, I aimed at compiling a more integrative approach to investigate the work motivation. These are the contributions of leader and workplace friendship relationships (context) towards the self-determined motivation (content) and the way in which individuals (mindfulness and personality) contribute to the association between relationship and motivation (process).

### **1.1. Statement of the Problem**

A survey related to employee motivation conducted by independent research agency among 2,006 British employees in 2015 provided notable results. It was found that 1/3 of UK employees surveyed do not remember a single activity regarding motivation. Approximately 25 % of those surveyed felt motivated at their workplace and whilst approximately 50 % of the employees felt neutral or negative feelings towards their job. When asked “what factor drives their motivation”, Their ratings for the aspects of boss, leader’s feedback, great peers and

environmental factors were; 25%, 17%, 19% and 16% respectively (Employee Motivation, 2015). In spite of these results, there is a lack of literature regarding the contribution of supervisor and co-workers in the workplace to the employee motivation

The thesis attempts to address how workplace relationships contribute to the motivation. Thus, we believe that the relationship between employee motivation and workplace relationships regarding co-worker and leader might further enhance further our understanding of motivational processes. Moreover, at the end of the thesis, practical implementations will be suggested for workplaces

## **1.2. Objectives of the Study and Hypotheses**

The main purpose of this dissertation is to investigate the connection between workplace relationships (leader-member exchange and workplace friendships) and motivation among employees. Additionally, it aims to explore the ways in which personality features and the level of mindfulness might influence the connection between interpersonal relationships and motivation. The major hypotheses below also summarise the objective of the study.

Hypotheses:

**H1:** Level of workplace friendships (WF) and Leader-Member Exchange (LMX) will be positively correlated with autonomous motivation (intrinsic motivation and identified motivation).

**H2:** Leader-Member Exchange (LMX) and workplace friendships (WF) predict separately autonomous motivation (intrinsic and identified motivation).

**H3:** Personality subdimensions and mindfulness moderate separately the relationship between Leader-Member Exchange (LMX) and intrinsic motivation.

**H4:** Personality subdimensions and mindfulness moderate separately the relationship between Leader-Member Exchange (LMX) and identified motivation.

**H5:** Personality subdimensions and mindfulness moderate separately the relationship between workplace friendship (WF) and autonomous motivation intrinsic motivation

**H6:** Personality subdimensions and mindfulness moderate separately the relationship between workplace friendship (WF) and identified motivation

**H7:** Personality subdimensions and mindfulness predict the level of amotivation

### **1.3. The significance of the study**

There is a growing body of literature that recognises the importance of motivation. I believe that this study plays a significant role in many perspectives.

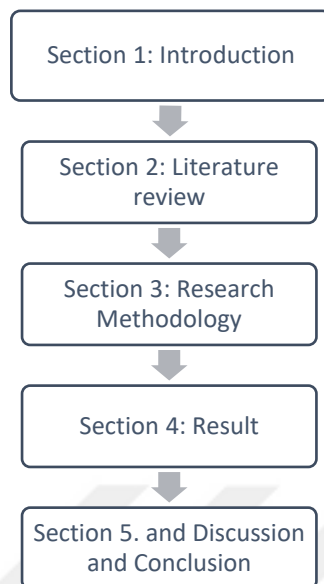
To some extent, this thesis is different to other studies, because it attempts to integrate distinct motivational factors (context-based, content-based) in a combined manner. Therefore, an overall framework consisted of existing results of the study and theories mentioned by Locke and Latham (2004). Moreover, it might bring a different perspective to the leadership domains because this study focuses on leader's relationships rather than leadership style (e.g. Transformational leadership) and although there are a few studies examining the connection between LMX and the workplace motivation, the association between workplace friendships and motivation do not seem sufficiently robust. It is expected that the lack of the literature might be compensated, to some extent.

Secondly, occupational psychology science always attempts to address emerging issues of society by placing scientific knowledge into workplaces. Thus, this study might allow the business world to meet the importance and discoveries of the scientific world. The significance of workplace relations will matter not only in one's personal life but also in organisations.

Thirdly, practical, applicable and evidence-based contexts might be a significant step for practitioners as variables in this study particularly as those chosen can be manipulated easily. In other words, LMX and workplace friendship can be manipulated with job design or with mindfulness training.

### **1.4. Structure of the Study**

This thesis is divided into five sections. Figure 1 displays the structure of the thesis. Section 1 is already introduced in this section; subsequent chapters' content are summarised below.



**Figure 1.** Outline of the thesis

Section 2 provides a review of the current literature including the nature of the connection between LMX, WF and the Self-determination theory of the existing literature. Furthermore, the personality and mindfulness were briefly mentioned as moderators. Section 3 presents the methodology used with relevant assumptions, measurement tools and analysis. Section 4 displays the analysis of obtained data through the SPSS and how each question has been answered via findings. Finally, Section 5 consists of discussion and a conclusion. This section clearly summarises the results and relates back to the themes, interpretations of findings, comparison with previous research and practical implications.

## **2. Literature Review.**

### **2.1. Overview of The Self-determination theory at Workplace**

This section outlines our reasons for choosing the Self-Determination theory (SDT) developed by Ryan and Deci (2001) in order to explain worker motivation through the relational process. Motivation through workplace relations can be built in various motivational frameworks. For instance, Alderfer's relatedness needs (1969), Social goal theory (Jarvinen & Nicholls, 1996), McClelland's affiliation theory (1961), achievement goal theory (Ryan & Shim, 2006) etc. However, SDT suggests a broader theoretical framework regarding how

relational processes between individuals influence motivation (La Guardia & Patrick, 2008). In particular, one of the main cores of SDT is based on the "relatedness needs" for social context.

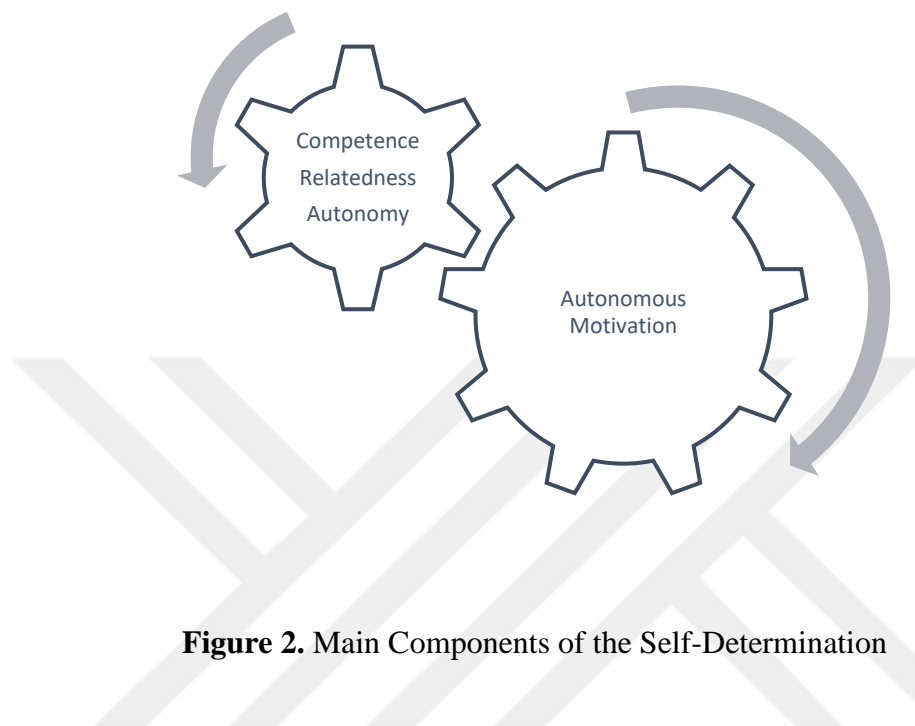
SDT describes a person's motivational orientations toward behaviours as a continuum of autonomy (Deci & Ryan, 2000). To draw the role of SDT, the main components and concepts of the SDT should be comprehended satisfactorily. SDT has consisted of two main components. These are autonomous motivation and controlled motivation. Autonomous motivation (intrinsic motivation) means that a person feels interested or pleasure in the activity itself (inherent satisfaction of the activity). In contrast, extrinsic motivation depends on the degree to which behaviour is controlled compared to which it is autonomous. Activities in extrinsic motivation (controlled motivation) are not interesting and it can be activated via a contingent behaviour or rewards to obtain desirable outcomes (Gagne & Deci, 2005).

Autonomous motivation might be a goal for individuals; however, individuals should sometimes be motivated by external sources. SDT has not ignored the importance of extrinsic motivation by classifying it. These are four different types of extrinsic motivation—integrated, identified, introjected, and external. Integrated regulation is described as a kind of extrinsic motivation and displays the same qualities as autonomous motivation (intrinsic motivation). However, activities in integrated regulations are seen as instrumentally significant for personal goals. Identified regulation means that human behaviours serve coherently personal value or goals. Introjected regulation is identified as being internally regulated via intrapsychic pressure to keep self-worth or reduce guilt. External regulation depends on obtaining a contingent reward or avoiding punishments. Finally, amotivation is a situation where individual display a lack of intent to act (Ryan & Deci, 2000).

Apparently, intrinsic and extrinsic motivation is a determinant of individual behaviours. They are both aimed at meeting three basic needs described by SDT. SDT views it as three basic psychological needs (autonomy, competence, and relatedness) for the motivation (Deci & Ryan, 2014) and these needs seem as nutrients which are necessary for people's lives, development and optimal functioning (Ryan, Sheldon, Kasser & Deci, 1996). The three needs facilitate to internalise and integrate extrinsic motivation by supporting autonomy.

Briefly, According to De Charms (2013), the autonomy refers to the sense of volition, cooperation, freedom and willingness related to own behaviour and experience that one is engaged. Competence need can be described as possessing willing and a sense of effectiveness, being skilled in activities and obtaining desired outcomes (White, 1959). Lastly, relatedness refers to one's need to feel connected to others (Baumeister & Leary, 1995). In other words, for individuals to get an optimum feeling of motivation, they should own freedom of choice for

actions (autonomy), effectively dealing with challenging tasks (competence), and feeling supported by significant people (relatedness).



**Figure 2.** Main Components of the Self-Determination

SDT might serve the motivation role in two ways. The first one is related to how relational people (leader and friends) contribute or thwart the fulfilment of needs. The second one concerns how motivational tendency regarding relationships can be sustained (La Guardia & Patrick, 2008). From our perspective, expected optimal functioning and motivation might be provided if a supportive environment (LMX and WF) attempts to comprehend a person's interests, perspective and preferences (autonomy) or helps them to ensure they undertake reasonable tasks, receive clear and consistent feedback and have a work structure for achievement (competence), or allows them to directly get involved, and makes them feeling important estimably and direct their energy to their colleagues (relatedness). Otherwise, if expected environment (LMX and Friendship) want to have excessive control, have unreasonable expectations, make tasks overly challenging, the optimal functioning mentioned above cannot be achieved (Ryan & Deci, 2000). Thus, the presence of the relational context is the considerable effect on the three needs that provides optimal functioning

Another process is “the attachment” underlying SDT. It means a kind of innate regulatory system. It is activated, when people experience a threatening problem from the environment, to relieve anxiety and create a safe environment (Bowlby, 1969). In a situation where threats

occur, people might protect each other from an unsafe environment and regulate their emotional strains. For instance, Krackhardt and Stern (1988) found that employees who have a friendship with other organisational units are more likely to behave cooperatively during a crisis compared to employees who have only made friends in their own unit.

Furthermore, relatedness - one of the main components of the study - is viewed as an independent and satisfying factor because individuals feel valuable with connections serving a sense of relatedness. Some researchers have stated that even people who do not desire or believe in connecting with others can suffer from the absence of relatedness or belongingness (e.g., Ryan, Bernstein, & Brown, 2010). Another component of this study is the social context (supportive environment). The social context is need-supportive for the target persons and should provide employees with new things and freedom of choice, warmth and respect, and avoiding controlling tendencies, language rewards, threats of punishments. Many studies showed that such interpersonal environments including need-supportive make people more autonomously motivated (e.g. Roth, Assor, Niemiec, Ryan, & Deci, 2009), and in turn increase performance and well-being (Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004).

In conclusion, the autonomy support and relatedness at the workplace might be a factor for higher levels of psychological need satisfaction which is linked with work engagement, performance and well-being (Baard, Deci, & Ryan, 2004). In all of the studies reviewed here, the SDT framework is sufficient to examine the relationships between motivation, Leader-Member Exchange and Workplace Friendship. In the following sections, this dissertation will review how leaders and co-workers in the workplace might play an active role in satisfying the psychological needs for autonomy, competence and relatedness regarding SDT and the main foundation of the hypotheses

## **2.2. Antecedents**

### **2.2.1. Workplace friendships**

Most people spend a substantial part of their life at work where they are involved in diverse interpersonal relationships such as peer-friends and leader-follower relations (Sias & Perry, 2004). A research study recently conducted in 120 companies across the UK showed that approximately 60% of employees considered happiness to be a more important aspect than salary; this perspective was more common in females (approximately 80%) compared to males (45%); 57% of participants stated that strong friendships made the workplace more enjoyable, and also increased productivity and creativity. Approximately 11% of employees did not have

a close friend in the workplace but they ideally, however, they would like one (Wildgoose, 2017). This is evidence of the importance of having friendship at work.

Berman, West and Ritcher (2002) have described workplace friendship in the sense of only acting in friendly or having mutual familiarity. They have characterised workplace friendship as non-exclusive workplace relations involving mutually shared interests, reciprocal liking, commitment, trust or values and excluded the romantic liaison from friendships. When examining the literature relating to the workplace friendship, there were many positive outcomes in organisations. These are; career development (Graen & Scandura, 1987); experience of social support (Kram & Isabella, 1985). Besides, job satisfaction and organisational commitment (Morrison, 2005). Social position (Gibbons & Olk, 2003); a supportive work environment and productivity (Ibrahim & Dickie, 20010). However, there is lack of an examination in the literature regarding the relationship between motivation and workplace friendship. Thus, we aimed at discovering whether or not workplace friendship has a positive influence at work.

In spite of the positive outcomes for organisations, there are some negative views about workplace friendship. Interestingly, Berman, West and Ritcher (2002) warned about the risk of workplace friendship. Firstly, some workplace friendship results in romantic liaisons or allegations regarding sexual harassment. Secondly, some managers have anxiety about friendships at work because it might cause a decrease in employees' loyalty, damage independent judgment, or lead to a conflict environment or favouritism towards particular members. Third, naïve friendships at work sometimes result in the political vulnerability in shared interests and then values between friends might be used against each other. Thus, workplace friendships might be seen as non-functional due to employee turnover and harmful influences.

Similarly, some thoughts such as legal-rational bureaucracies described by Adams and Balfour (1998) is discussed in the literature. These thoughts do not allow friendship in business because they believed that limited human relations are functional for fulfilling the duty. From a clinical perspective, some psychoanalytic views suggested that a lack of close relations might cause anxiety or anti-social behaviour (Sievers, 1999) or some individuals might be dependent on friends that cause anxiety or depression. These negative outcomes may result in absenteeism and turnover and a decrease in motivation (Berman, West & Ritcher, 2002). Overall, a significant part of the literature accept that friendship is in favour of management (Berman,

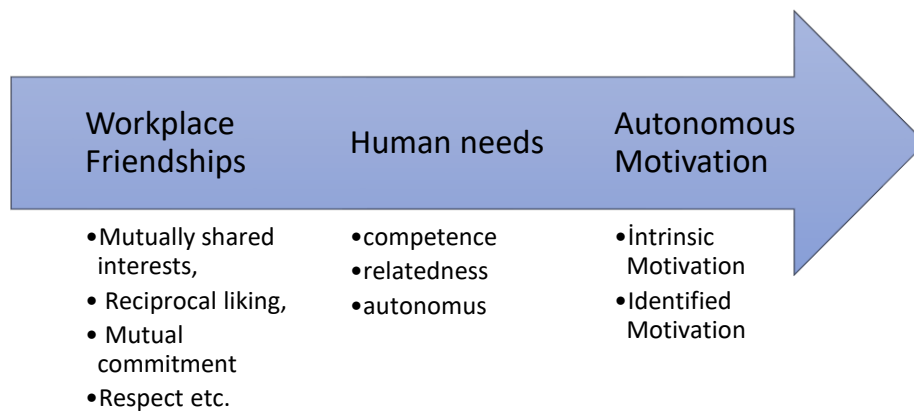
West & Ritzer, 2002) and perceive it as a positive factor regarding the benefits of organisations.

From the perspective of SDT, friendship quality is not only viewed as supportive relationships but is also characterised by a close relationship including mutual support and care. In relation to this, each indicator defining friendship relations was significantly mutual (Deci & Ryan, 2014). It means that when people rated their relationship score, they have a mutual agreement related to their relationships. Therefore, we might assume that positive social-contextual factors such as affirmative feedback might enhance feelings of competence, autonomy and intrinsic motivation in people (Deci & Ryan, 2000). We expect that the sense of friendship coming from workplace (communication, collectively solving problems, hangout others, informal talking opportunity etc.) can be linked to motivation. These factors might result in the sense of autonomy, competence and relatedness, and in turn enhance motivation and performance.

Researchers have examined the relationships between academic motivation and social relations (e.g. Wentzel, 1996). They have particularly engaged in why people build and maintain relationships with their friends (Okada, 2017). Self-Determination might give us a comprehensive framework and explanation about why people engage in friendships. The previous section mentioned four different types of motivation from the Self Determination perspective. These are external regulation, introjected regulation, identified regulation, and intrinsic motivation; these aspects are postulated for optimal growth (Gagné, & Deci, 2005). If we are elaborating further, a person might maintain a friendship for different reasons. For instance, they might want to get the other's approval and feel more security (external regulation), to build self-esteem and avoid feeling ashamed about themselves (introjected regulation), or friendship at the workplace might align with their personal goals (identified regulation). In this case, employees might enjoy talking and feeling personal happiness with friends (intrinsic motivation). However, we expect that the workplace friendship will facilitate autonomous motivation (intrinsic and identified motivation) because the level of workplace friendship in this study refer to the shared interests, reciprocal liking, commitment, trust, and values among co-workers.

In summary, although there is a connection between workplace friendship and organisational outcomes or academic motivation, the association between work motivation and workplace friendship is not examined sufficiently in the literature. Thus, we aimed at discovering whether or not friendship at work might influence worker motivation.

**Figure 3.** A Representation of WF and Motivation Associations



**H2a:** Workplace friendships (WF) predict separately autonomous motivation (intrinsic and identified motivation).

### 2.2.2. Leader-member exchange (LMX)

Workplace Friendship might involve a relationship between individuals of a different age, gender, or status. Furthermore, some studies accepted friendships that were between subordinates and a supervisor (e.g. Valerius, 1998). Thus, this part will mention a relationship between leader-follower (LMX). However, LMX, one of the Leadership domains, is different from typical friendships. It refers to the working relationships based on confidence, regard and mutual obligation (Graen & Uhl-Bien, 1995).

Leader-Member Exchange theory assumes that the effectiveness of the leadership depended on the relationships between leader and follower. This relationship changes throughout a continuum between low-quality and high-quality relationships. Relationships based on low-quality are characterised by impersonal, contractual interactions whereas high-quality relationships refer to mutual trust, respect, and obligations (Graen & Uhl-bien, 1995). This view is also supported by Liden and Maslyn (1998) who stated that if subordinates have a good relationship and high-quality exchange with leaders, they showed higher performance, personal satisfaction, commitment to the organisation and lower turnover rates.

Overall, we believe that workers who have a good relationship with their leader may feel confident, motivated and take initiative. Various studies have assessed the efficacy of LMX on organisational outcomes. Overall, studies found positive outcomes. For instance, self-

efficacy and optimism (Murphy & Ensher, 1999); Task performance, citizenship (Martin, Guillaume, Thomas, Lee & Epitropaki, 2016); Commitment (Truckenbrodt, 2000). Additionally, Graves and Luciano (2013) suggested that when leaders demonstrate high LMX behaviours, three psychological needs (autonomy, competence and relatedness) are fulfilled more positively for workers because leaders showing high-quality relations might form a sense of belonging and connection with followers. In contrast to this, low-quality LMX demonstrated more transactional and impersonal relationships between follower and leaders.

SDT has accepted a macro theory of human motivation and has been applied in several fields such as management and work motivation (Ryan & Deci, 2017). SDT has gone more towards the psychological need satisfaction and autonomous motivation (Gagne & Deci 2005) at the explanation of the relationship between follower and supervisor. For example, a quantitative study examining the relationship between LMX and need satisfaction showed that the Leader-Member Exchange from the employees' perspective is positively related to the needs for competence, autonomy and relatedness (Graves & Luciaono, 2013). For this reason, we believe that the leader-follower relationship probably might become a key instrument role in employee need satisfaction and, in turn, autonomous motivation.

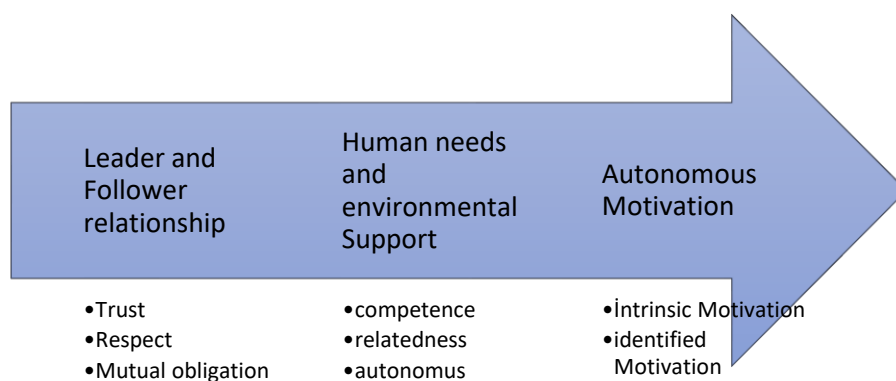
In the literature, SDT recommends that the role of leader or manager should be effective in building the supportive environment that allows followers the feeling of autonomous motivation and meets the three psychological needs (autonomous, competence and relatedness) (Gagné & Deci, 2005). In particular, autonomy-supportive behaviours (allow employees choice of tasks, introducing initiative, giving feedback) might stimulate inspirational feelings (e.g. Otis & Pelletier, 2005). The researchers suggested that LMX may create a facilitator factor on making a choice and feeling of meaning refer to competence, autonomy and relatedness (E.g. Liden, Wayne & Sparrowe, 2000). Otherwise, the relationships created contractually cause followers to have little chance of forming strong close connection with the leader. Thus, the relatedness need probability cannot be satisfied by the mutual relationships (Graen & Uhl-Bien 1995). We consequently expect that once the relationship between leader and follower (trust, mutual obligation, reciprocal influence, resource of sharing and respect) developed, employees might feel more autonomous and there will be an increased probability of satisfying needs.

Another perspective of the SDT is that needs satisfaction and autonomous motivation can be influenced by the social context (e.g. leadership, job design etc.) (Deci & Ryan 2014; Gagne´ & Deci 2005). It is likely that the context which allows individuals' true self (interest, value) might provide employees with need fulfilment and autonomous motivation (Deci &

Ryan, 2000). Therefore, our perspective is that leadership relationships with co-workers have an important role in creating the required context. A few studies have found that autonomous motivation might occur in which leaders behave in an autonomy-supportive style such as listening to an employee's opinion or providing employees with some choice of tasks (e.g., Baard, Deci & Ryan, 2004). Furthermore, the leaders might allow more opportunities with employees whom they trusted and have good relationships with. These is a chance of more freedom, more rewards or no rules restricting their daily work (Vecchio & Gobdel, 1984) or more decisional responsibilities (Aryee & Chen, 2006). Overall, these studies have given a reason to think the theoretical framework of the Self-determination might seem consistent with the connection between LMX and Self-determination.

In conclusion, high-LMX relationships are related to all three needs in terms of SDT. autonomy that stems from job appreciation provided by the leader, competence that comes from leader feedback and support, and relatedness through the strong interpersonal relationships with the leader (Martin, Guillaume, Thomas, Lee & Epitropaki, 2016). Moreover, we do not argue that LMX and WF in the organisations can predict all the motivational process. Thus, we consider how some variables such as team experience and tenure might manipulate the connection between LMX, WF and Motivation.

**Figure 4.** A Representation of LMX and Motivation Associations



**H2b:** Leader-Member Exchange (LMX) predict autonomous motivation (intrinsic and identified motivation)

## **2.3.Moderators**

Moderator variables are described as a variable that can change causal effect whereas mediator is a link between independent and dependent variables (Wu & Zumbo, 2008). Briefly stated, mediation might explain the process of “why and how”, whilst moderation explains the connection “when or for whom” in the statement (Fraizer, Tix & Barron, 2004).

This dissertation consider a few moderators that examine the connection between LMX-WF and motivation. These are mindfulness and personality. These moderators were selected for exploratory purposes. Thus, we do not claim hypotheses regarding the direction or magnitude of the relationships.

### **2.3.1. Mindfulness**

Mindfulness has been defined as a consciousness and awareness of an internal and external world accompanying one's experience. It creates a fuller awareness of the present time and results in behaviours concerning motivation and well-being (Brown & Ryan, 2003). Mediator and moderator roles of mindfulness have been proposed to explain diverse outcomes regarding motivation. Ruffault, Bernier, Judge and Fournier (2016) found that there is a moderation role between intrinsic motivation regarding exercise and physical activity levels. Another study suggested that implicit autonomy orientation might predict day-to-day motivation for individuals who have lower dispositional mindfulness. (Levesque & Brown, 2007). Furthermore, it has been found that mindful attention might decrease the effects of motivational states on traits regarding appetitive behaviours (Papies, Pronk, Keesman & Barsalou, 2005). Finally, trait-based mindfulness might create a moderator effect on both need support or the basic need frustration regarding self-determination (Schultz et al., 2015). However, no study has yet looked at the direct impact of mindfulness on the relationship between workplace friendships and motivation, although there are LMX-WF-motivation relationships. Thus, it is necessary to understand the underlying mechanism of the mindfulness to ascertain what is effective on motivation.

Mindfulness refers to a state of consciousness regarding one’s emotion, thoughts and action (Brown & Ryan, 2003). In line with this definition, we expect that people with higher levels of mindfulness can regulate and express their thoughts, emotions and behaviours effectively. Hayes and Feldman (2004) support our point of view. They argue that mindfulness training allows an ability to regulate one’s own emotion in relationships and thus, individuals who have higher mindfulness can avoid emotional entanglement or under-engagement in their

relationships, in turn, resulting in wellness. Furthermore, this self-regulated process which is facilitated through awareness might enable people to describe their needs and desires, thereby facilitating the expression of behaviour fitting with prompts (Deci & Ryan, 1985). For this reason, we expect that employees with mindfulness can characterise their basic psychological needs and show more self-determined motivation at work, have a satisfactory relationship with their leader or supervisor and therefore more autonomous motivation. People with mindfulness would endeavour to reach their goals through a greater autonomy (Grégoire, Bouffard & Vezeau, 2012).

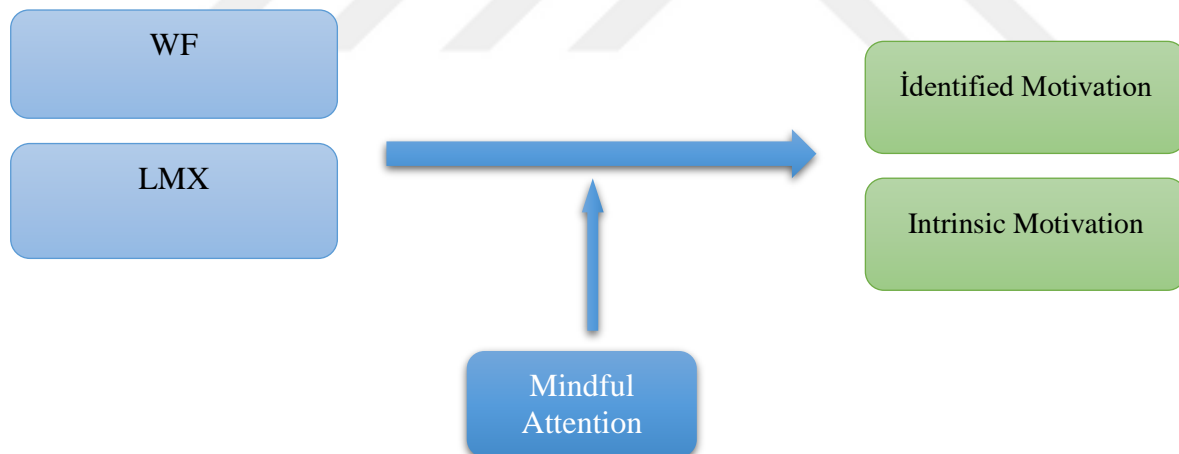
Many studies have debated the role of awareness and attention in providing psychological maintenance. One of these is the Self-Determination Theory (SDT), claiming that being open to awareness might facilitate one's choice of behaviour in relation to needs, values and interests (Deci & Ryan, 1980). In contrast to this, automatic or controlled processes might further inhibit the considered needs and values (Ryan, Kuhl & Deci, 1997). The relevant empirical study, including the role of mindfulness in the workplace, conducted by Schultz et al. (2015), indicated that trait-based mindfulness might have a moderator effect on both need support or the basic need frustration. In other words, employees with higher mindfulness felt less harm in the non-supportive work environment, resulting in less need frustration and then good well-being. Moreover, when considered, autonomy is facilitated by reflective awareness (Ryan, 2009), people with mindfulness would feel more intrinsic values and they are more consistent between they have and what they want (Brown, Ryan & Creswell, 2007).

On the other hand, some views - such as a pragmatical opinion - criticised awareness, opining that automaticity thought might save time and give free time to the mind for more significant tasks (Hofmann, 2015). Humans can think automatically inherently from experiences, entrenched mental models and habits. These automatic thoughts play a pivotal role in people's survival because it gives an immediate reactions (Bargh, 1994). Although this view criticises awareness, our expectations are strengthened. The studies showed that autonomic thoughts damage people's relationships due to irrational beliefs (Buschman, Horn, Blankenship, Garcia & Bohan, 2018). In contrast to this, practising mindfulness meditation helps reduce both thought rumination (Jain et al., 2007) and cognitive distortions (Sears & Kraus, 2009). Thus, we anticipate that mindfulness might support the relationships between leader and follower, or among co-workers, by inhibiting thought rumination and cognitive distortions.

We assume that employees should be aware of modifying their relational behaviour with their leader/supervisor if they want to feel satisfaction, pleasure and valued. The rationale here is that mindfulness allows individuals greater attention and better communication, decreased conflict, reduced reactivity and strong expression emotionally (Good et al., 2016) and self-regulation (Deci & Ryan, 1985). In conclusion, dual reciprocal satisfying relations and motivation require an awareness of employees in workplace settings. In spite of this argument, no studies have examined the direct impact of mindfulness acting in a moderator role between workplace relationships (LMX and WF) and motivation, though current literature could offer a theoretical perspective on how mindfulness can work on motivation. Thus, this study aims to examine the following hypotheses:

**Hypothesis:** Mindfulness moderates the relationship between Leader-Member Exchange (LMX) and Autonomous motivation (intrinsic motivation or identified motivation).

**Hypothesis:** Mindfulness moderates the relationship between workplace friendship (WF) and Autonomous motivation (intrinsic motivation or identified motivation).



**Figure 5.** A representation of Moderation Role of Mindfulness on (LMX-WF) and Autonomous association

### 2.3.2. Personality

Most researchers accept that individual differences might have an influence on motivational process or traits (Konfar & Ackerman, 2000). For example, Causality Orientation Theory based on SDT suggests that individual difference is described as the extent to which people are autonomy oriented towards the controlled-oriented (based on extrinsic motivation) or the

impersonally oriented (based on amotivation). However, this dissertation is based on the Five Factor Model which is dominant in the literature because organisational psychology studies accept that personality characteristics can be classified into five traits (conscientiousness, extraversion, openness, agreeableness and neuroticism) (Chu, Lee, Huang and Lin, 2013). Additionally, it is intriguing that there is relatively limited research analysing the association between the big five personality traits and self-determined motivation.

Some scholar argues that personality would play as moderator role for job performance (Demerouti, 2006) or predictor, mediator suggested by studies. For instance, one study indicated that personality plays a predictive role in academic motivation. This means that agreeableness, conscientiousness and openness were found to have significant associations with academic motivation (Mammadov, 2016). Another study found that personality creates a moderation influence on mindfulness training (Vibe et al., 2015). Higher score levels on conscientiousness illustrated an increased variance of mindfulness training, whereas extraversion did not show an interaction effect on the regression model. Another quantitative study exploring relationships between academic motivation and personality features illustrated conscientiousness and openness as predictive of intrinsic motivation (17%), whereas conscientiousness and extraversion are predictive of extrinsic motivation (13%). Finally, amotivation is predicted for conscientiousness and agreeableness (11%) (Komarraju, Karau & Schmeck, 2009). However, no study has yet examined the direct impact of trait features on the relationship between workplace relationships and motivation.

The main reason why we think personality dimensions create a moderation is that we believe that differences in personality features might reflect distinct motivational preferences. For example, a study examining the association between self-determination of exercise behaviour and personality showed that neuroticism is more related to introjected regulation, extraversion more with more identified and intrinsic motivation, and conscientiousness is associated with less external regulation (Ingledeu, Markland and Sheppard, 2004). Relating these findings, authors also speculated that extravert people might be perceived as more self-determined as exercises may meet the relatedness needs for extraverted people and again, exercises may meet the competence needs for conscientious individuals. Another research finding analysing the Five Factor model and Self-Determined motivation associations indicated that autonomy is related to extraversion and agreeableness, whereas control based extrinsic motivation is negatively related to agreeableness, and positively related and impersonal traits based on amotivation is correlated with neuroticism and negatively related to extraversion and

conscientiousness (Deponde, 2004). However, no study has found any relationship between autonomy and traits (Koestner and Losier, 1996).

Another reason why we thought personality might a moderation is the findings of some studies regarding the big five personality and general causality scales based on the Self-Determination. This finding showed that firstly, autonomous orientation could share some conceptual similarities with extraversion and agreeableness. For instance, in the literature autonomy from Self-Determination theory and extraversion personality might result in well-being and more engagement in social environments (Olesen, Thompsen, Schnieber & Tønnesvang) Moreover, autonomy (Deci and Ryan, 1985) and agreeableness (McCrae and Costa, 2003) might require honesty and trust in social relations. Both autonomy (Deci and Ryan, 1985) and extraversion (DeNeve and Cooper, 1998) were likely to predict of well-being. Secondly impersonal based on amotivation may share conceptual similarities with neuroticism. Both encompass negative well-being, helplessness and avoidance behaviour (Deci and Ryan, 1985; McCrae and Costa, 2003). In empirical studies, impersonal (Deci and Ryan, 1985) and neuroticism (DeNeve and Cooper, 1998) predict negative well-being states. Defensive and avoidance behaviours are predicted by impersonal (based on amotivation) (Hodgins et al., 2006) and Neuroticism (Jensen-Campbell) during the disclosure.

Thus, to investigate further, it is necessary to comprehend the underlying mechanism of the personality and the association between motivation and a dyadic relationship. For instance, It is a fact that extravert individuals are inclined to find more satisfactory relationships (Bernerth et al., 2008) and energetic extravert people want to be around other energetic and positive individuals (Williams and Sternberg, 1988). Thus, taking into account that extraversion seems a relative necessity for building a dyadic relationship, we may assume that in extraverted-dyadic groups, the congruence among group members could increase the reciprocal relationships (e.g. WF or LMX), and in turn, self-determined motivation.

For conscientiousness, LMX studies suggest that dyadic relationships between supervisors and employees might be negatively related to differences in conscientiousness (Bernerth et al., 2008) The rationale here is that conscientious individuals are possibly inclined to intolerance of ambiguity or gain satisfaction from controlling the environment (Costa and McCrae, 1988). This statement is likely to cause an unsatisfactory relationship between follower and leader. A similar empirical study indicated that team performance is negatively correlated to differences in conscientiousness among groups (Kichuk and Wiesner, 1997) In

contrast to this, similarities in conscientiousness among groups is positively related to commitment and satisfaction (Meglino, Ravlin and Adkins, 1989).

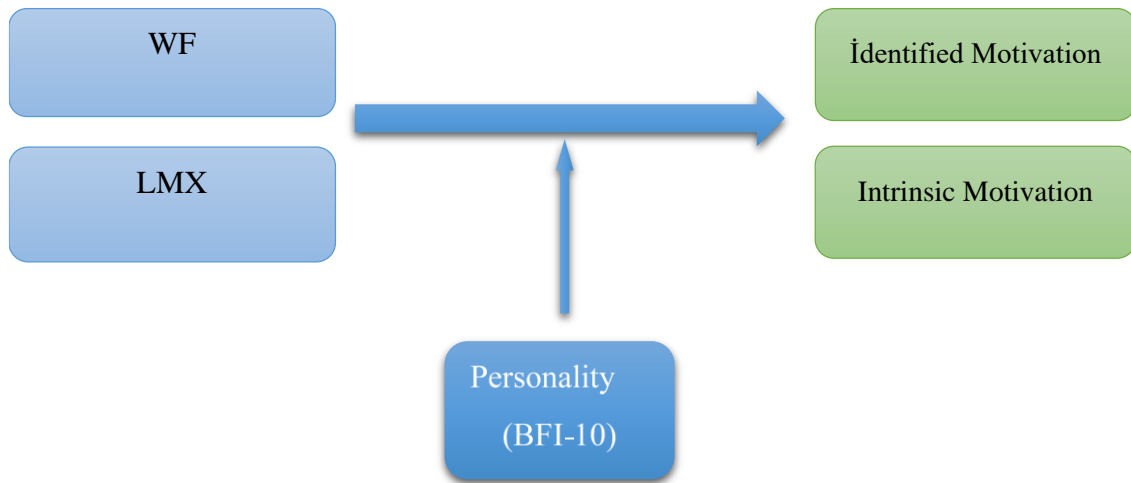
Through the above-mentioned personality features, neurotic individuals are relatively characterised with negative emotions, such as guilt, fear, sadness and embarrassment. Neurotic employees might create attitudes towards their work and have no confidence and optimism in themselves, possibly leading to less ambition (Liao & Leen, 2000). Thus, we anticipated that neuroticism can damage autonomous motivation-workplace relations (LMX and WF). It could be a related to amotivation

There are remaining areas that have been left unexplored. These include the role of personality subdimensions in LMX and Workplace Friendships and Self Determination. To address this interplay, we based this dissertation on currently literature that could offer a theoretical perspective how personality probably work on Self-Determined motivation. We aimed at exploring if personality moderated between LMX, WF and Self-Determined Motivation. Therefore, this study addresses the following hypothesises

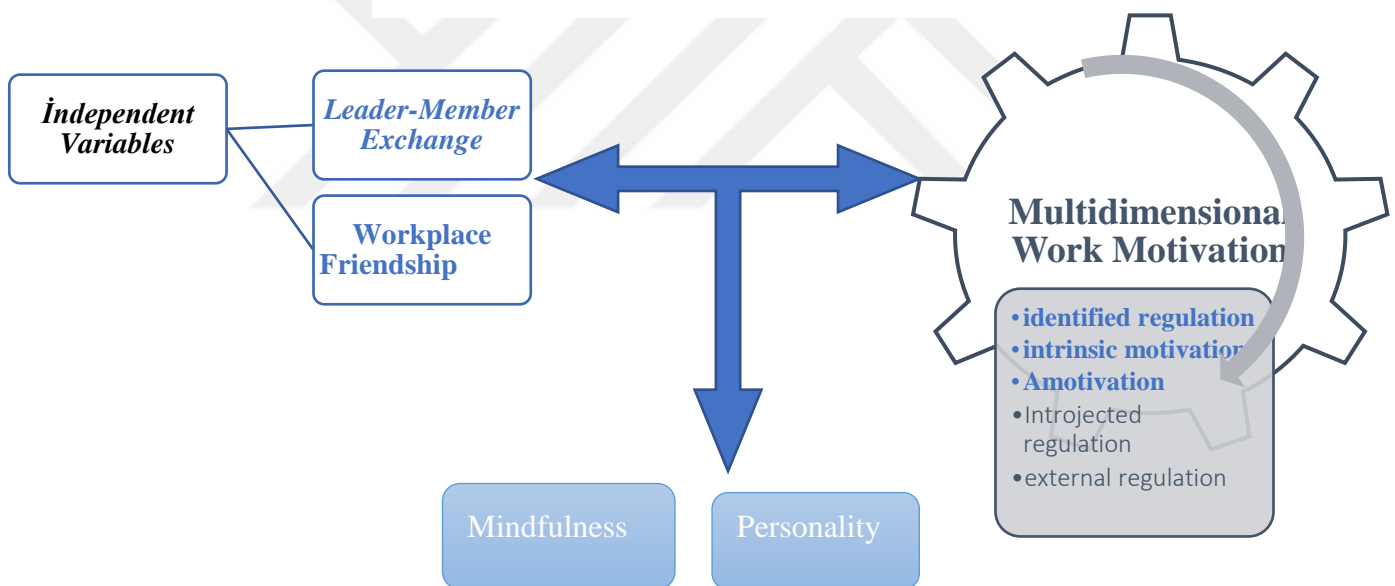
**Hypothesis.** Personality moderates the relationship between Leader-Member Exchange and autonomous motivation

**Hypothesis:** Personality moderates the relationship between Workplace Friendship and autonomous motivation

**Figure 6.** A representation of Moderation Role of Mindfulness on (LMX-WF) and Autonomous association



**Figure 7.**Conceptual Model of the All Variables



### 3. Method

#### 3.1. Participants

A random sample of subordinate employees living in the UK were recruited via Amazon Mturk (Mturk). To collect the data for the study, the participants were asked to complete one demographic form and five questionnaires. These questionnaires were related directly to themselves, their managers and co-workers. The sample was limited to those who have at least a co-worker and leader (supervisor). Thus, the study does not want to include the self-employed

or employees who do not have a leader or co-worker. In total, 96 participants actually completed all of them. There were 30 female participants in the study and 66 males. The youngest person was 20 and the oldest was 62, with a mean age of 33. Social demographic features including job type, team-work experience, management type, education, tenure and working pattern are shown in Table 1. (Appendix I).

**Table 3.1.** Means, Standard Deviations, Totals, and Percentages of Demographic Variables

<b>Demographic Variable</b>	<b>N</b>	<b>SD</b>	<b>M</b>	<b>%</b>
<b>Age</b>	96	8.85	33	
<b>Tenure</b>	96	3.65	5.21	
<b>Gender</b>				
Male	66			68.8
Female	30			31.3
<b>Team-work experience</b>				
Yes	93			96.9
No	3			3.1
<b>Working pattern</b>				
Full time	82			85.4
Part-time	14			14.6
<b>Education</b>				
Bachelors' degree	56			58.3
Master's degree	23			24

Others	18	17.7
<b>Management Levels</b>		
Senior	7	7.3
Middle	49	51
Worker	40	42
<b>Job Type</b>		
Education	6	6.3
Health	6	6.3
Management	13	13.5
Engineering	37	38.5
Business-Office	34	35.4

### 3.2. Procedure

After obtaining ethical approval from the university, it was decided to collect data via online surveys as it allows easy access to participants and means that the data set can be easily transferred to Excel and the SPSS. A monthly subscription package was bought in the form of Survey Monkey which is an online survey site that enables an individual to create a survey for use over the internet.

Before the data collection process, the measurement tools, information sheet and consent forms were transferred to the Survey Monkey. Then, the first three pages of surveys consisted of an information sheet and consent form. Thus, participants who are confirming the consent form could start to fill in demographic questions and then the five questionnaires respectively. At the end of the survey, there was a thank you page and the researcher's email address for those who wanted to provide a feedback report.

During data collection, Amazon Mturk tool (Mturk) was used. Mturk is an online platform that enables researchers to share the survey link. It allows researchers to have access to a large population of willing participants for research studies in a short time. Overall process begins with creating a task (survey link) by researcher. This task includes a title and description

of the online task to be seen by workers, who are registered with Amazon Mturk. Afterwards, the researcher needs to state the amount of reward that employees will receive and the amount of time the questionnaire will take to complete on the Amazon Mturk site. Then, workers can browse available tasks. When the process is successfully completed, workers are paid rewards for each task.

An advantage of Amazon Mturk is that researchers define eligibility criteria for participation such as location, employment industry, and employment status or additional qualifications. For example, having a co-worker and leader. The example process is shown in Figure 8.

The screenshot shows the Amazon Mturk HIT preview interface. At the top, it displays the requester 'SEN', a reward of '\$1.00 per HIT', 0 available HITs, and a duration of 20 minutes. The qualifications required are 'Location is GB' and 'Having co-worker and leader has been granted'. Below this is a 'HIT Preview' section containing the survey details. The survey title is 'Workplace Motivation'. The text of the survey asks for opinions on workplace friendships and leaders, with a requirement to have at least a co-worker and a supervisor. It provides a survey link and a box for the survey code, with a 'Submit' button at the bottom.

Short Survey (10 minutes)

Requester: SEN      Reward: \$1.00 per HIT      HITs available: 0      Duration: 20 Minutes

Qualifications Required: Location is GB, Having co-worker and leader has been granted

HIT Preview

<https://www.surveymonkey.co.uk/r/WMBH8NX>

<https://www.surveymonkey.co.uk/r/WMBH8NX>

**Workplace Motivation**

We are conducting an academic survey about workplace motivation. We need to understand your opinion about workplace friendships and leader. If you have at least a co-worker and a supervisor (leader) at work, please select the link below to complete the survey. At the end of the survey, you will receive a code to paste into the box below to receive credit for taking our survey.

**Make sure to leave this window open as you complete the survey.** When you are finished, you will return to this page to paste the code into the box.

Survey link: <https://www.surveymonkey.co.uk/r/WMBH8NX>

Provide the survey code here:

Submit

**Figure 8.** Amazon Mturk Panel

The relevant studies showed that Amazon Mturk is a reliable option for collecting data. For example; According to Buhrmester, Kwang and Gosling (2011), Amazon Mturk has a diverse pool of members and the data obtained via the site is just as reliable as that acquired by traditional methods. Thus, high-quality data can be collected inexpensively and rapidly. Additionally, they anticipated that MTurk will soon become a major tool for research in psychology and elsewhere in social science. In the literature, there are many positive evaluations relating to Amazon Mturk (e.g. Crowston, 2012; Ford, 2017; Buhrmester, Kwang & Gosling, 2018).

After the collected data, the prepared survey is published electronically through the Amazon Mechanical Turk panel. Once the data was collected, it was exported into an Excel file as raw data. The written texts were converted into numbers. Additionally, some uncompleted data were deleted. Following this, all data was sent to the SPSS for analysis.

### **3.3. Research Design and Philosophy**

In this study, quantitative research was used via a cross-sectional questionnaire design. Quantitative research includes the collection and analysis of numerical data. The researcher looks at the social reality as an external and objective reality (Bryman & Bell, 2011).

This approach is based on positivism. The main principles of this are that knowledge is collected via facts and the aim of theories is to compose a tested hypothesis regarding epistemological. Its ontological aspect is objectivism. Objectivist researchers believe that the social world as concrete, measurable that impact on people in some way (E.g. Morgan & Smircich, 1980). In addition to this, the methodological perspective refers to the way of knowledge discovery. It was based on a deductive approach. This allows an association between independent and dependent variables by measuring the hypothesis with possible general causal explanations (Sarantakos, 2005). Observable findings manipulated variables to aid the obtained truth in the positivist inquiry (Antwi & Hamza, 2015).

In this study, the researcher adopted the paradigms mentioned above and drew a relevant methodological roadmap. Therefore, the research questions are built on this methodological paradigm and aim to discover a relationship between independent and dependent variables. A major advantage of the quantitative method is that it is administered and evaluated quickly (Yauch & Steudel, 2003). We do not need to spend time at the organisation before conducting survey. However, some questions in the survey may be unclear for some participants who only speak English as a second language. For this reason, the researcher left an e-mail address and replied quickly to messages from participants. However, a disadvantage of this method is that we cannot explore why or whether independent variables impact on dependent variables.

Many scholars have recommended that researchers need a good working knowledge of the method that will be used (e.g. Tashakkori and Teddlie, 2010). As such, the main reason why we chose this methodology is the experience of researcher and proficiency because the researcher conducted a few quantitative studies beforehand and was good at using the SPSS.

### **3.4. Ethical Issues**

The research was based on the University of Sheffield Management School ethics procedure (*see* Appendix F). The first and second pages consisted of an information sheet (*see* Appendix)

that provides an overview of the dissertation and ethical issues. In particular, the fact that the information of the volunteering participants would be kept anonymous and confidential was highlighted in the information sheet. The third page consisted of a consent form which participants in the survey approved.

No one accessed the data except the researcher and the relevant supervisor for checking the data. of the researcher kept the questionnaire responses safe during the data collection period.

### **3.5. Measures**

This section consists of the measurement tools which were used in the study (*see* Appendix). These measurement tools have been used effectively in many previous studies and have reliability and validity in the relevant samples.

#### **3.5.1. Demographic Characteristics.**

To explore group differences and to provide control variables, some demographic information was collected. Demographic questions consist of gender, age, job type, tenure, management level, education level, teamwork experience, and working patterns.

#### **3.5.2. LMX-7 (Leader-Member Exchange).**

This scale measures employee perspective about their leaders (Graen & Uhl-Bien, 1995). Although LMX is dyadic constructs, LMX was used in this study to assess subordinates' perspective in order to comprehend leader-member exchange relationships. Hence, supervisors rated their LMX scores by considering their leaders. (E.g. Graves & Luciano, 2013). The LMX-7 consists of 7 items in total. LMX-7 score was calculated as a mean of items and higher ranges referred to stronger- high-quality LMX (Northouse, 2018). A sample item was "How well does your supervisor understand your problems and needs?". Workers rated their score on a 5-pointed Likert-type scale. Answer to each question had a different label ( $\alpha = .85$ ).

#### **3.5.3. The State MAAS (The Mindful Attention Awareness Scale).**

The Mindful Attention Awareness Scale (The State). It is a 5-item scale that measures one's level of mindful attention (a receptive state of mind). In order words, it is to what extent one pays attention while observing what is taking place or what is occurring in the present. The state MAAS items are composed of the trait form of the MAAS (e.g., "I'm finding it difficult to stay focused on what's happening in the present"). Trait MAAS scores have been shown to predict state MAAS scores, and state scores have been related to psychological well-being

outcomes. The score is calculated as mean of items. After 5 items are reverse coded, a high score refers to higher state mindfulness (Brown & Ryan, 2003) ( $\alpha = .81$ ).

#### **3.5.4. A Brief Version of the Big Five Personality Inventory (BFI-10).**

There are BFI-10 items in many samples such as English and German. In this study, the English version was used to describe personality. Participants rated their score from 1 (disagree strongly) to 5 (agree strongly). The scale consists of five subdimensions. These are extraversion (1R, 6); Agreeableness (2, 7R); Conscientiousness (3R, 8); Neuroticism (4R, 9); Openness (5R, 10). The questionnaire subdimensions is calculated as the mean of 2 items. In the study with limited time constraints, BFI-10 is recommended by Rammstedt and John (2007). However, in this study, BFI-10 subdimensions have two items, Spearman-Brown correlations were run for the current study. The coefficient values for extraversion, conscientiousness, openness, agreeableness and neuroticism are smaller than expected and the original study. Extraversion ( $\alpha = .59$ ); Agreeableness ( $\alpha = .34$ ); Conscientiousness ( $\alpha = .56$ ); Neuroticism ( $\alpha = .60$ ); Openness ( $\alpha = .04$ ). In the literature, coefficient values could not acceptable if it is smaller than 0.5 (Klinie, 2013). Thus, the acceptable reliabilities for agreeableness and openness were not met and we had to exclude the openness and the agreeableness subdimensions from the current study.

#### **3.5.5. Workplace Friendship Scale.**

This scale assesses friendships at work. It refers to the degree to which employees have an opportunity to establish informal relations with other co-workers. It includes the 12 item and two dimensions (Friendship prevalence and Friendship opportunities) with a 5-point Likert Scale from 1= Strongly Disagree to 5= Strongly Agree. (Nielsen, Jex, & Adams, 2000). After the last item is reverse coded, the questionnaire is calculated as the mean of 12 items ( $\alpha = .91$ ).

#### **3.5.6. The Multidimensional Work Motivation Scale (MWMS).**

A Self-determination based scale with 19 items assesses autonomous and controlled motivation against amotivation. Participants rated their primary reasons for performing their job on a seven-point scale from 1 (not at all for this reason) to 7 (exactly for this reason). The questionnaire consists of 6 motivational dimensions: extrinsic regulation (three items; e.g. "To avoid being criticised by others"), introjected regulation (four items; e.g. "Because I have to prove to myself that I can"), identified regulation (three items; e.g. "Because I consider it important to put effort into this job") and intrinsic motivation (three items; e.g. "Because I have fun doing my job"), extrinsic regulation and amotivation. (Gagné et al., 2015). The scale score

is calculated as a mean of items of subdimensions. Amotivation ( $\alpha = .89$ ); Extrinsic regulation-social ( $\alpha = .84$ ); Extrinsic regulation-material ( $\alpha = .70$ ); Introjected regulation ( $\alpha = .84$ ); Identified regulation ( $\alpha = .92$ ) and intrinsic motivation ( $\alpha = .94$ ).

Furthermore, intrinsic motivation, identified motivation is used as the dependent variable in the dissertation because Self Determination Theory suggested identified regulation and intrinsic motivation represent autonomous motivation and amotivation stands on its own (Deci & Ryan, 2000). This thesis aimed at examining the influence of Leader-Member Exchange and Workplace Friendship on autonomous motivation.

## 4. Results

In this chapter, the dissertation results are analysed by SPSS statistics (Version 25). Initially, in this chapter, the preliminary analysis was conducted to describe the original collected data, missing data and then calculate the reliability of the scales. Subsequently, the regression assumption is checked in order for whether or not the dataset fitted the regression analysis well. Finally, the hypotheses in the current study will be tested.

### 4.1. Preliminary Analysis

Firstly, typing errors, out-of-range figures and typing errors were detected through data screening, while some erroneous data was fixed, and some incorrect data was removed. In total, 96 participants have contributed to the data. Before the analysis, results illustrated that there is no missing and faulty data amongst the rest of the dataset.

Secondly, there were some items in the scale (BFI-10, WF) which are to be reverse scored based on the author's instructions. All the scales of reliability coefficients were calculated with Cronbach's alpha except personality questionnaires. The values calculated for each scale provided us with justification for item inclusion because every scale's reliability coefficients had alpha 0.7 and above (Tabachnick & Fidell, 2007), apart from the BFI-10 (see Table 4.1). For the reliability of two-item scales, use of the Spearman-Brown correlation has been suggested by Eisinga, Te Grotenhuis and Pelzer, (2013).

However, the coefficient values for extraversion, conscientiousness, openness, agreeableness and neuroticism are smaller than expected and the original study (Rammstedt and John (2007)). In the literature, they accepted Cronbach's alpha reliability coefficient values between 0.5 and 0.6 are poor, but it is unacceptable if it is smaller than 0.5 (Klinie, 2013). Thus,

the acceptable reliabilities for agreeableness and openness were not met and we had to exclude the openness and the agreeableness subdimensions from the statistical analysis.

**Table 4.1.** Internal consistency reliability coefficients for all scales used

Scale	Reliability coefficient
1. Amotivation	.89
2. Extrinsic regulation-Social	.84
3. Extrinsic regulation-material	.70
4. Introjected regulation	.84
5. Identified regulation	.92
6. Intrinsic motivation	.94
7. Neuroticism	.60
8. Conscientiousness	.56
9. Agreeableness	.34
10. Openness	.04
11. Leader-Member Exchange (LMX)	.85
12. The State Mindful Attention Awareness (MAAS)	.81
13. Workplace Friendships (WF)	.91

*Note:* N=116. Coefficients for scales between 7 and 10 were calculate via Spearman-Brown correlations because the subdimensions of BFI-10 have two-item scales.

## 4.2. Assumptions

There are a few regression assumptions needing checking to conduct multiple regression analysis. Thus, we could base our analysis to be reliable and valid. These are linearity, normality, no multicollinearity and the homoscedasticity of residuals and the independence of observations.

### 4.2.1. Linear Relationship

The linear regression assumes that the relationship between the independent and dependent variables should be linear. This assumption can be checked via scatter plots (Appendix A) or the Pearson correlation coefficient in [Table 4.2](#). The scatter plots and correlation table show that the linear assumption has been met.

#### **4.2.2. Normality**

The linear regression analysis requires that all variables should be linear. This assumption can be checked with a Q-Q-Plot or with a goodness of fit test such as the Skewness or Kurtosis. Skewness and kurtosis values shows that most of the variables met the assumption of normality. The accepted values fall within the range between -1.5 and +1.5 (Tabachnick & Fidell, 2013); or between -2 to 2 (George & Mallery, 2010) in the literature. The skewness and Kurtosis tables show that the assumption of normality is met for the relevant variables (Appendix B).

#### **4.2.3. There is no multicollinearity in the data**

One of the multiple regressions assumes is that there is not high correlation between the independent variables. This assumption can be checked by using the Variance Inflation Factor (VIF) and Tolerance values. An analysis of collinearity statistics illustrates that VIF scores were smaller than 10, and tolerance scores were bigger than 0.2 (Appendix C).

#### **4.2.4. Homogeneity of Variance**

A scatterplot of the standardised residuals with the standardised predicted values showed that there were no signs of funnelling which means that the variance of the residuals is the same everywhere) (Appendix D).

#### **4.2.5. There are no influential cases having an effect on model**

In all cases, Cook's distances were less than 1 regarding outliers and influential points. This suggests individual cases did not unduly influence the model (Appendix E). Finally, participants were sufficient to identify a medium-sized effect (observed  $N=96$  greater than the required  $N=90$ ). Overall, the data in the current study are convenient to conduct Multiple Linear Regression analysis.

### **4.3 Hypothesis testing**

To test the hypotheses, distinct statistical tests were conducted in accordance with the type of variables. The Pearson correlation coefficient test was conducted to test the correlational relationships between continuous dependent variables (**H1a and H1b**). Furthermore, the multiple linear regression and predictive analysis was conducted to predict the relationship between continuous dependent variable and independent variables. The independent variables

in the regression analysis should be continuous or categorical (**H2, H3, H4, H5, H6, H7**). Finally, an Independent sample t-test and One-Way ANOVA test were conducted to examine whether group means (categorical) differ from each other. While T-test compare two groups and one-way Anova compares more than two groups.

#### **4.3.1. Correlational Relationships**

**H1a.** Workplace friendships (WF) will be positively associated with autonomous motivation (intrinsic motivation and identified motivation)

**H1b.** Leader-Member Exchange (LMX) will be positively associated with autonomous motivation (intrinsic motivation and identified motivation)

Pearson correlation coefficient test was conducted to test H1a and H1b, while also measuring the strength of a linear relationship between variables of the study. The means, standard deviations (SDs) and correlations can be found in [Table 4.2](#).

The results of the Pearson correlation have indicated that there was a significant positive association between Workplace Friendships (WF) and Leader-Member Exchange (LMX), ( $r=.55, p<.01$ ). WF was also positively related to identified regulation ( $r=.40=p<.01$ ); intrinsic motivation ( $r=.54, p<.01$ ) and negatively related to amotivation ( $r=-.24, p<.05$ ). Similarly, there is a negative correlation between LMX and amotivation ( $r=-.33, p<.05$ ). In contrast to this, LMX was positively correlation related to identified motivation ( $r=.37, p<.05$ ), intrinsic motivation ( $r=.54, p<.05$ ). Amotivation was also negatively related to WF opportunity ( $r=-.27, p<.01$ ) whereas there was no significant relationship between WF-prevalence and amotivation ( $r=.17, p>.05$ ).

**Table 4.2.** Correlation Between All Variables in Dataset

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>1. WF</b>	1															
<b>2. LMX-mean</b>	.55**	1														
<b>3. Amotivation</b>	-.24*	-.33**	1													
<b>4. Ext social.</b>	.07	-.07	.55**	1												
<b>5. Ext material</b>	.11	-.15	.23*	.46**	1											
<b>6. Introjected</b>	.18	.11	.20	.35**	.21*	1										
<b>7. Identified</b>	.40**	.37**	-.09	.22*	.15	.66**	1									
<b>8. Intrinsic</b>	.54**	.44**	-.01	.20	.12	.53**	.70**	1								
<b>9. WF opportunity</b>	.90**	.43**	-.27**	.07	.16	.14	.37**	.38**	1							
<b>10. WF prevalence</b>	.93**	.57**	-.17	.06	.04	.18	.36**	.58**	.68**	1						
<b>11. Mindfulness</b>	.26*	.31**	-.60**	-.41**	-.08	-.12	.12	.06	.28**	.20	1					
<b>12. Extraversion</b>	.39**	.33**	.01	-.07	-.08	.22*	.29**	.42**	.25*	.45**	.07	1				
<b>13. Conscientiousness</b>	.25*	.32**	-.59**	-.29**	.11	-.15	.25*	.05	.27**	.19	.39**	.19	1			
<b>14. Neuroticism</b>	-.34**	-.26*	.30**	.17	-.16	-.11	-.28**	-.25*	-.36**	-.28**	-.36**	-.24*	-.38**	1		
<b>15. Age</b>	.06	.14	-.34**	-.39**	.02	-.06	.07	-.06	.14	-.02	.19	.08	.35**	-.16	1	
<b>16. Tenure</b>	.26*	.24*	-.23*	-.16	.11	.03	.02	.09	.29**	.19	.22*	.15	.21*	-.27**	.31**	1
$\bar{X}$	3.73	3.55	2.47	3.55	4.12	4.29	4.86	4.40	3.95	3.51	3.69	2.97	3.88	2.48	33.39	5.21
SD	0.76	0.66	1.57	1.61	1.42	1.51	1.54	1.78	0.75	0.89	1.08	1.06	0.88	1.00	8.85	3.66
N	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96

\* $p < .05$ , \*\* $p < .01$ , LMX: Leader-Member Exchange, Ext. Material: Extrinsic regulation-material Ext. Social: Extrinsic regulation- social WF: Workplace friendship. WF prevalence and opportunity (Workplace friendship's subdimensions).

### 4.3.2. Predicational Relationships

In this section, both of the hypotheses were tested separately with their results shown in the Tables below.

**H2a:** Leader-Member Exchange (LMX) and Workplace friendships (WF) predict Intrinsic motivation.

**H2b:** Leader-Member Exchange (LMX) and Workplace friendships (WF) predict Identified motivation.

Firstly, it was tested whether LMX and WF had a predictor role in intrinsic motivation and identified motivation. The results of multiple regression were showed in Table 4.3.

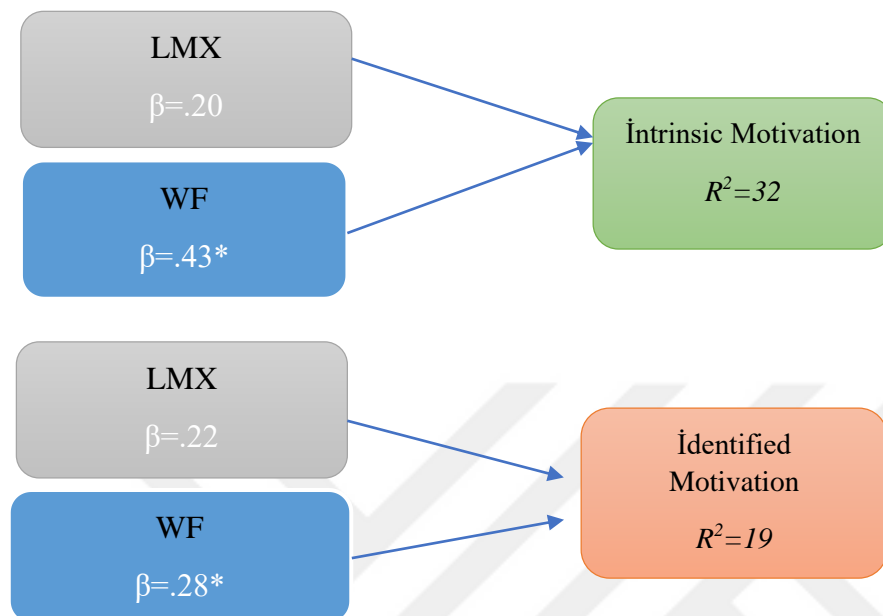
**Table 4.3.** Results of Hierarchical Regression Analysis for Variables Predicting Intrinsic and Identified Motivation (N=96)

Predictors	Depended Variables											
	Intrinsic motivation						Identified motivation					
	Model 1			Model 2			Model 1			Model 2		
	B	SH	$\beta$	B	SH	$\beta$	B	SH	$\beta$	B	SH	$\beta$
LMX	.1.17	.25	.44*	.53	.28	.20 <sup>1</sup>	.86	.22	.37*	.50	.26	.22 <sup>1</sup>
WF				1.01	.24	.43*				.57	.23	.28*
$R^2$	.19*			.32*			.14*			.19*		
$R^2\Delta$	.19*			.13*			.14*			.05*		

Note. <sup>1</sup>p<.10, \*p<.05, LMX: Leader-Member Exchange, WF: Workplace Friendships

As Table 4.3 indicates, in step 1 of the regression, LMX was entered as the sole predictor of intrinsic motivation. LMX was significantly related to the intrinsic motivation in Step 1 ( $R^2=.19$ ,  $p <.05$ ); then in step 2, Workplace Friendship was entered, with levels of LMX controlled, and was positively related to outcome while the proportion of explained variance increased ( $\Delta R^2=.13$ ,  $p <.05$ ). However, when the predicting effect of WF was entered, the relationship between LMX and intrinsic motivation was not significant anymore ( $\beta=.20$ ,  $p>.05$ ). It can thus be shown that these relationships between LMX, WF and intrinsic motivation are similar in identified motivation. The difference for identified motivation is that the amount of total explained variances is 32 % for intrinsic motivation while 19 % for identified motivation.

**Figure 9.** A representation of two separated multiple regression analysis including a direct relationship between the independent variables (LMX and WF) and dependent variables (intrinsic motivation or identified motivation), Grey boxes illustrate non-significant relationships. Regression coefficients are standardized. Note: N=96 \*p<.05, \*



#### 4.3.2.1. Moderation Relationships

In the next steps, the hypotheses associated with moderator effect of personality and mindfulness were tested.

**H3a:** Personality subdimensions moderate the relationship between LMX and intrinsic motivation

**H3b:** Mindfulness moderate the relationship between LMX and intrinsic motivation.

Baron and Kenny (1986) have suggested that when the effects of the predictive variable and the moderating variables were controlled, then the mutual interaction should be statistically significant.

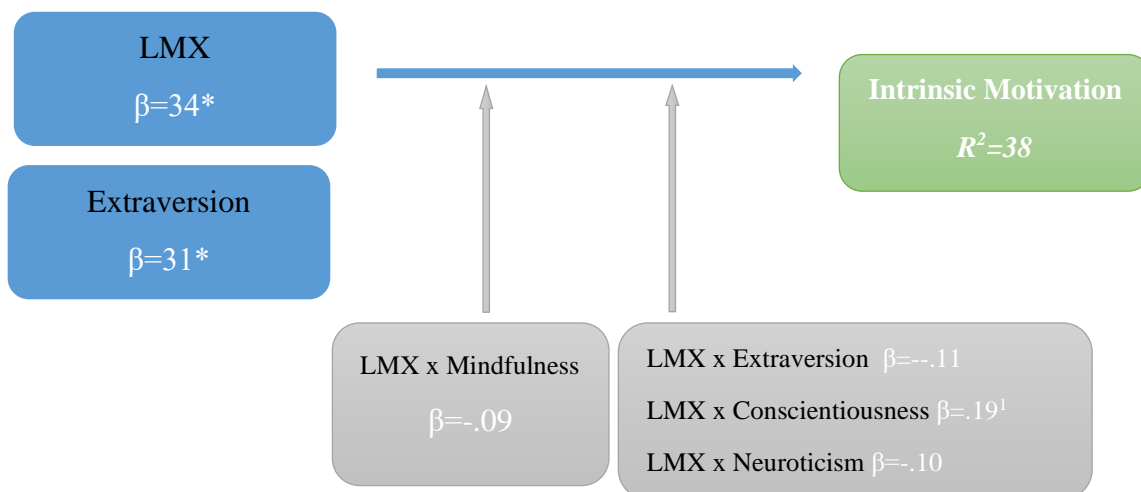
During the analysis of moderating effects of moderator (personality and mind fulness). Initially, Leader-Member Exchange (LMX) and personality types/mindfulness are followed by the interaction between moderators (personality and mindfulness) while LMX were taken into the hierarchical regression analysis respectively. Hierarchic regression analysis was implemented for this purpose and the results are shown in Table 4.4.

**Table 4.4.** Results of Hierarchical Regression Analysis for Variables Predicting the Intrinsic Motivation Model (N=96)

Moderator	Predictors	Model 1			Model 2			Model 3		
		B	SH	$\beta$	B	SH	$\beta$	B	SH	B
Personality	LMX	1.17	.25	.44*	.95	.26	.35*	.90	.25	.34*
	Extraversion				.50	.16	.30*	.52	.16	.31*
	Conscientiousness				-.36	.20	-.18	-.35	.19	-.17
	Neuroticism				-.27	.17	-.15	-.26	.17	-.14
	LMX x Extraversion							-.19	.16	-.11
	LMX x Conscientiousness							.35	.18	.19 <sup>1</sup>
	LMX x Neuroticism							-.18	.17	-.10
	$R^2$									.38*
	$R^2\Delta$									.07*
	Mindfulness	LMX	1.17	.25	.44*	1.24	.26	.46*	1.21	.26
Mindfulness					-.13	.16	-.08	-.14	.16	-.08
LMX x Mindfulness								.16	.18	.09
$R^2$										.20*
$R^2\Delta$										.01

Note. <sup>1</sup>p<.10, \*p<.05, LMX: Leader-Member Exchange

As Table 4.4 indicates, the mindfulness of personality types has not had any moderating effect on the link between LMX and intrinsic motivation.



**Figure 10** shows the direct and moderational relationships. Grey boxes illustrate non-significant interaction effect. Regression coefficients are standardized. Note: N=96 \*p<.05, \*

**H4a:** Personality moderate the relationship between LMX and identified motivation.

**H4b:** Mindfulness moderate the relationship between LMX and identified motivation.

Then, moderator role of personality and mindfulness in relationship between LMX and identified motivation were tested and the results of the analysis were showed in Table 4.5.

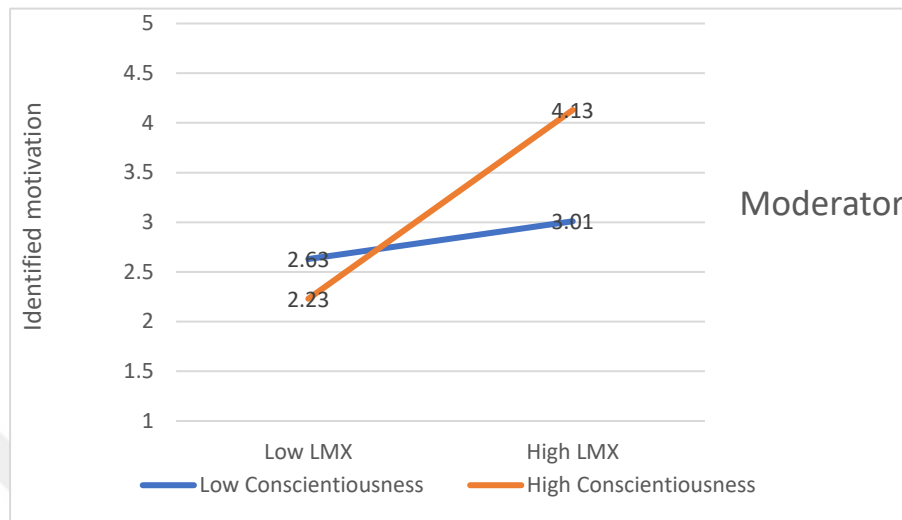
**Table 4.5.** Results of Hierarchical Regression Analysis for Variables Predicting Identified Motivation Model (N=96)

Moderator	Predictors	Model 1			Model 2			Model 3		
		B	SH	$\beta$	B	SH	$\beta$	B	SH	B
Personality	LMX	.86	.22	.37*	.59	.24	.25*	.57	.24	.25*
	Extraversion				.23	.15	.16	.25	.15	.17
	Consciousness				.14	.18	.08	.18	.18	.10
	Neuroticism				-.23	.16	-.15	-.19	.16	-.12
	LMX x Extraversion							-.08	.15	-.05
	LMX x Consciousness							.38	.17	.24*
	LMX x Neuroticism							-.05	.16	-.03
	$R^2$									
$R^2\Delta$										
Mindfulness	LMX	.86	.22	.37*	.85	.24	.37*	.80	.23	.35*
	Mindfulness				.02	.14	.01	.01	.14	.01
	LMX x Mindfulness							.31	.16	.18 <sup>1</sup>
	$R^2$									
	$R^2\Delta$									

Note. <sup>1</sup>p<.10, \*p<.05, LMX: Leader-Member Exchange

As Table 4.5 indicates, the Consciousness ( $\beta=.24$ ,  $p<.05$ ) personality type had a moderating effect on the link between LMX and identified motivation. Thus, those higher in conscientiousness level showed more identified motivation. However, other personality types and mindfulness did not have any moderating effect on this link.

**Figure 11** shows that Identified Motivation Predicted by the Interaction of LMX and the Conscientiousness



**H5a:** Personality subdimensions moderate the relationship between WF and intrinsic motivation.

**H5b:** Mindfulness moderates the relationship between WF and intrinsic motivation.

In this step, the moderator role of personality and mindfulness in the relationship between WF and intrinsic motivation was tested, and the results of the analysis are shown in Table 4.6.

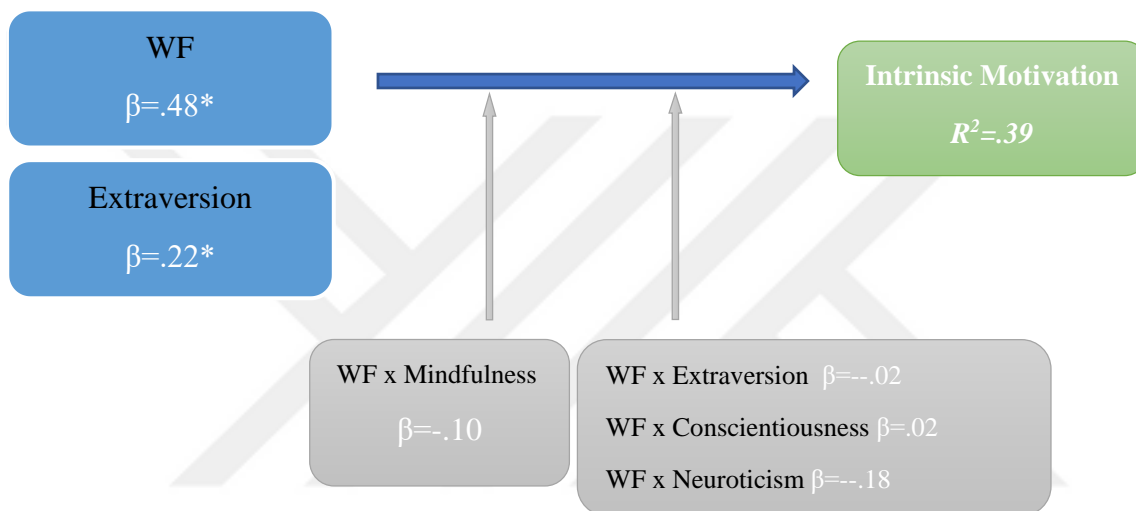
**Table 4.6.** Results of Hierarchical Regression Analysis for Variables Predicting Intrinsic Motivation Model (N=96)

Moderator	Predictors	Model 1			Model 2			Model 3		
		B	SH	$\beta$	B	SH	$\beta$	B	SH	B
Personality	WF	1.27	.20	.54*	1.05	.22	.45*	1.12	.23	.48*
	Extraversion				.42	.15	.25*	.37	.16	.22*
	Conscientiousness				-.29	.19	-.14	-.32	.19	-.16
	Neuroticism				-.16	.17	-.09	-.12	.17	-.07
	WF x Extraversion							-.04	.15	-.02
	WF x Conscientiousness							.03	.19	.02
	WF x Neuroticism							-.32	.19	-.18
	$R^2$									.39*
$R^2\Delta$									.03	
Mindfulness	WF	1.27	.20	.54*	1.32	.21	.56*	1.41	.23	.60*

Mindfulness						
WF x Mindfulness						
$R^2$	.29*		.30*		.31*	
$R^2\Delta$	.12*		.01		.00	

Note. \* $p < .05$ , LMX: Leader-Member Exchange, WF: Workplace Friendship

As Table 4.6 indicates, personality types mindfulness did not have a moderating effect on the link between WF and intrinsic motivation.



**Figure 12** shows the direct and moderational relationships. Grey boxes illustrate non-significant relationships. Regression coefficients are standardised. Note:  $N=96$  \* $p < .05$ .

**H6a:** Personality subdimensions moderate the relationship between WF and identified motivation.

**H6b:** Mindfulness moderates the relationship between WF and identified motivation.

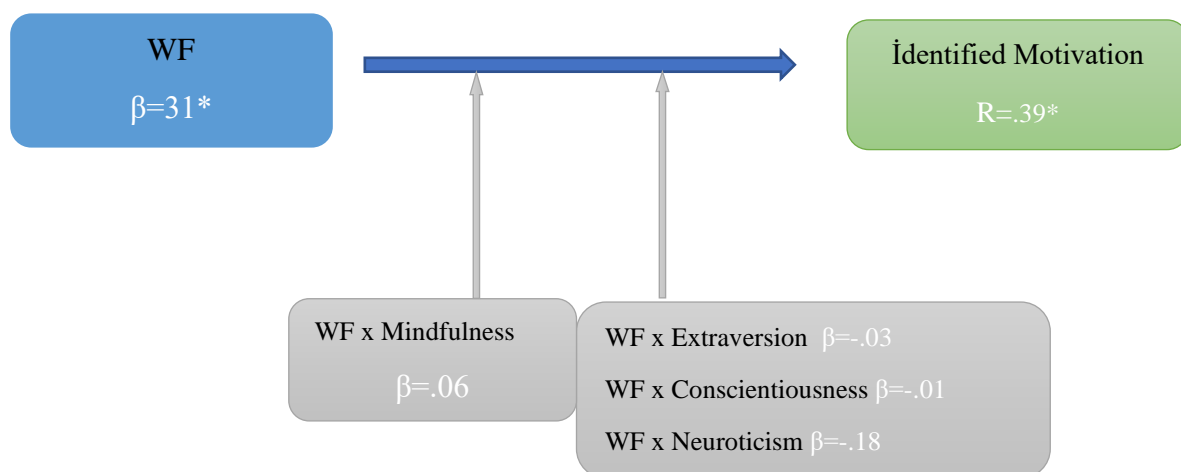
Finally, the moderator role of personality and mindfulness in the relationship between WF and identified motivation was tested, and the results of the analysis are shown in Table 4.7.

**Table 4.7.** Results of Hierarchical Regression Analysis for Variables Predicting the Identified Motivation Model (N=96)

Moderator	Predictors	Model 1			Model 2			Model 3		
		B	SH	$\beta$	B	SH	$\beta$	B	SH	B
Personality	WF	.81	.19	.40*	.57	.22	.28*	.63	.23	.31*
	Extraversion				.20	.15	.14	.16	.16	.11
	Conscientiousness				.19	.18	.11	.17	.19	.10
	Neuroticism				-.17	.16	-.11	-.14	.17	-.09
	WF x Extraversion							-.05	.15	-.03
	WF x Conscientiousness							-.01	.19	-.01
	WF x Neuroticism							-.28	.18	-.18
	$R^2$									.39*
	$R^2\Delta$									.03
	Mindfulness	WF	.81	.19	.40*	.80	.20	.39*	.76	.22
Mindfulness					.04	.14	.03	.05	.14	.03
WF x Mindfulness								.09	.17	.06
$R^2$										.16*
$R^2\Delta$										.00

Note. \* $p < .05$ , WF: Workplace Friendship

As Table 4.7 indicates, personality type mindfulness has not had any moderating effect on the link between WF and identified motivation.



**Figure 13.** A representation of the direct and moderational relationships. The grey boxes represent non-significant interaction effect. Regression coefficients are standardised. Note: N=96 \* $p < .05$ .

**H7:** Personality dimensions and neuroticism predict the level of Amotivation

Finally, multiple regression analysis was conducted to test hypothesis H7. However, before multiple regression analysis. The results are shown in Table 4.8.

Before the multiple regression analysis, a Pearson correlation coefficient test was already (Table 4.2) conducted to measure the strength of a linear relationship between amotivation and other variables of the study. According to the results, the variables with correlational relationships entered the regression model, as shown in table 6.

**Table 4.8.** Results of Hierarchical Regression Analysis for Variables Predicting Amotivation Model (N=96) Dependent Variable: Amotivation

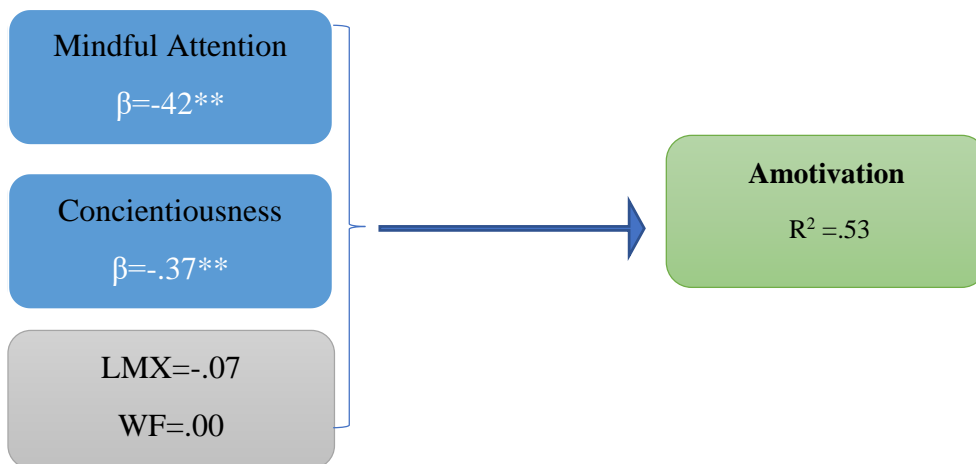
Model	R	R <sup>2</sup>	B	SH	$\beta$	t	p	Tolerance	VIF
<b>Constant</b>	.729 <sup>a</sup>	.532	8.7	1.1		8.1	.000		
1. Consciousness			-.67	.16	-.37	-4.3	.000*	.69	1.44
2. Neuroticism			-.05	.13	-.03	-.38	.704	.74	1.35
3. Mindful attention			-.61	.12	-.42	-5.1	.000*	.76	1.31
4. Age			-.02	.01	-.12	-1.4	.153	.81	1.23
5. Tenure			-.01	.03	-.02	-.22	.830	.81	1.23
6. LMX			-.16	.22	-.07	-.73	.468	.64	1.56
7. WF			.01	.19	.00	.04	.971	.64	1.57

Dependent Variable: Amotivation

As Table 4.8 illustrate, multiple regression analysis was used to test if amotivation was predicted independent variables. The results of the regression indicated the two predictors explained 53% of the variance ( $R^2 = .532$ ,  $F_{(7,88)} = 14.72$ ,  $p < .01$ ). It was found that conscientiousness ( $\beta = -.37$ ,  $p < .05$ ) and mindfulness ( $\beta = -.42$ ,  $p < .05$ ) predicted amotivation, but not LMX ( $\beta = .07$ ,  $p > .05$ ) and WF ( $\beta = .00$ ,  $p > .05$ )

Therefore, the participant's amotivation level might decrease with the change of mindfulness and conscientiousness level.

**Figure 14.** A representation of the direct relationships. Grey boxes represent non-significant relationships. Regression coefficients are standardised. Note: N=96 \* $p < .05$ , \*\* $p < .001$



Taken together, these results suggest that Workplace Friendship and Leader-Member Exchange can predict intrinsic motivation and identified motivation separately. However, both WF and LMX have entered a regression model, while only WF is a predictor of intrinsic motivation and identified motivation. On this subject, mindfulness did not create any moderation effect on association between LMX, WF and autonomous motivation. However, conscientiousness and LMX have an interaction effect on identified motivation. Interestingly, amotivation was negatively predicted by both mindfulness and conscientiousness.

## 5. Discussion

The dissertation aimed to investigate between workplace relationships (Leader-Member exchange and workplace friendships) and Self-determined motivation among employees. Additionally, there is an examination of moderation role of personality features and the level of mindfulness that might influence the connection between workplace relationships relationship and motivation. This section will also discuss the significant and non-significant findings presented in the result section by referring to the theoretical framework and empirical studies. Finally, limitations of the thesis and implementation will be mentioned, and some directions are recommended for future research in this section.

### 5.1. Summary of Findings

WF and LMX are positively correlated with mindfulness, extraversion, conscientiousness but negatively correlated neuroticism, amotivation.

Intrinsic motivation is positively related to extraversion and negatively related to neuroticism whereas identified motivation is positively related to conscientiousness, negatively related to neuroticism and extraversion. Finally, amotivation is positively related to neuroticism and negatively related to conscientiousness and mindfulness.

Furthermore, there is a few predicational relationships suggested by the regression model. LMX and WF are strongly predictive of intrinsic motivation and identified motivation separately. However, when the effect of WF are included in the regression model, the relationship between LMX and intrinsic motivation were no longer significant. The similar effect of LMX and WF is valid for identified motivation. Thus, this finding suggested that WF is a stronger predictor than LMX of intrinsic motivation and identified motivation

Furthermore, except the conscientiousness, there is no moderation effect of mindfulness and personality on the association between WF and autonomous motivation or LMX and autonomous motivation. There is only conscientiousness personality type had interaction effect on the direct relationships between LMX and identified motivation.

### 5.2. Interpretation of Findings

#### 5.2.1. Independent variables.

##### 5.2.1.1. *Leader-Member exchange (LMX).*

Regression results in the current study showed that Leader-Member Exchange (LMX) is correlated with intrinsic motivation and identified motivation (**H1b**). Furthermore, LMX is predictive of intrinsic motivation (**H2a**) and identified motivation (**H2b**) regardless of workplace friendship.

Overall, the findings in the literature were consistent with our hypotheses and supported the idea that LMX is an important factor in the facilitation of autonomous motivation. Previous studies showed that high-quality LMX is related to employee motivation and satisfaction (Malik et al., 2005). A similar study found that LMX can enhance motivation in workers to develop creativity (Tierney, Farmer & Graen, 1999). A possible explanation for this might be that when leaders demonstrate high LMX behaviours, three psychological needs (autonomy, competence and relatedness) are fulfilled more positively for workers because leaders who show high-quality relations might form a sense of belonging and connection with followers. In contrast to this, low-quality LMX demonstrated more transactional and impersonal relationships between follower and leaders (Graves & Luciano, 2013). Another explanation would be the social context that influences motivation. SDT recommends the role of leader or manager should be effective in building the supportive environment that allows followers the feeling of autonomous motivation. The empirical study highlighted that relationships including trust, emphasised development (Naile & Selesho, 2014) and autonomy-supportive behaviours of leaders (e.g. Otis & Pelletier, 2005) would motivate employees. Overall, possible explanation in the literature focused on the contribution of need satisfaction and supportive social context provided by LMX.

#### ***5.2.1.2. Workplace Friendships (WF)***

Regression results showed that Workplace friendship (WF) is predictive of intrinsic motivation and identified motivation (**H2a and H2b**). Furthermore, WF is positively correlated to LMX, mindfulness, extraversion and conscientiousness but a negatively correlated to neuroticism, and amotivation. This result is in line with those of previous studies.

There are a relatively limited empirical studies examining the association between workplace motivation and friendships. For this reason, we attempted to explain with more theoretical frameworks. In the literature, scholars are more engaged in why people increasingly build and maintain relationships with their friends more (e.g. Okada, 2017). Self-determination provides us with an explanation for this question. The employees could adopt friendship at workplace because a sense of friendship might align with their personal goals (identified regulation) or

employees might enjoy talking and feel personal happiness with their colleagues (intrinsic motivation). Furthermore, Herzberg's theory assumes that recognition by leaders or co-workers is described as a motivator factor inherently (Herzberg, 1966).

Similar to LMX, Theoretical perspective also focused more on social support or environment come from a sense of friendships at work that might satisfy human needs. For example, positive social-contextual factors such as affirmative feedback coming from friends might enhance feelings of competence, autonomy and intrinsic motivation in individuals (Deci & Ryan, 2000).

Furthermore, Sociocultural theory suggests that motivation might be derived from participation in social activity and collaboration is likely to increase motivation (Pressick-Kilborn, Sainsbury & Walker, 2005). Baron (2013) supported this hypothesis and claimed that friendship may mediate effectively between collaboration and increased motivation. In contrast to, some studies found that WF could show negative outcomes such as competitive behaviour, along with the beginning of the deterioration of friendships (Sias, Heath, Perry, Silva & Fix, 2004)

Workplace friendships are associated with many variables such as organisational structure, emotion, teamwork, a bureaucratic and traditional structure in organisations (Berman, West & Richter, 2002; Tse & Dasborough, 2008). We suggest that there needs to be a more empirical study regarding WF and organisational outcomes.

## **5.2.2. Moderation variables.**

### ***5.2.2.1. Mindfulness and Personality Dimensions***

Regression results in the current study show that mindfulness and personality dimensions could not create a moderation effect on LMX-WF-motivation associations (**H3, H5, H4b, H6 are rejected**). only conscientiousness was shown to have a moderation effect on the direct relationship between LMX and identified motivation (**H4a**)

The findings suggested that the logic behind the most theoretical argument was not supported. Furthermore, this dissertation could not compare our findings with empirical studies because no studies examine their moderation role in the relationship between LMX and motivation or WF and motivation. However, some studies found the moderation role of mindfulness on motivation (e.g. Levesque & Brown, 2007; Schultz et al., 2015). However, this

moderation effect has not created between LMX-WF-motivation associations. Overall, there were no past findings to support or conflict it.

We suggested that LMX and WF are a strong predictor of intrinsic motivation and identified motivation. Therefore, LMX, WF and motivation relationship is not depending on any situation or any person. In other words, intrinsic motivation or identified motivation should have the same relationship with the outcomes, regardless of what level mindfulness or personality individual have. Another explanation would be a methodological limitation which will be discussed in the following title.

Contrary to the predicational relationship, correlations results in the current study show that mindfulness is positively correlated with WF and LMX and negatively correlated with extrinsic regulation-social motivation. This result is in accordance with previous studies. A recent study found that mindfulness enables employees high-quality LMX, in turn, employee performance. For this, mindfulness is important in the relationship between supervisor and follower because one's persons mindfulness should translate employee performance (Reb, Chaturvedi, Narayanan, & Kudesia, 2018). Siegel (2007) also asserted that the mindfulness process has a positive impact on the relationships between supervisor and follower and also a supervisor with mindful could create interpersonal attunement. A possible explanation related to this, emphatic concern, perspective taking, and response flexibility mediated the mindfulness-LMX relationships are mediated (Auten, 2017) and These aspects such as empathy and response flexibility are a significant role in improving social relationships (Glomb et al., 2011).

Furthermore, mindfulness and conscientiousness are negative predictors of amotivation. This result is in accordance with previous studies. For instance, a recent study found that mindfulness has shown a negative correlation towards amotivation (Ruffault, Bernier, Juge, & Fournier, 2016). Thus, this is worth that an exploration need should be for future studies.

### **5.3. Theoretical Implications**

There are a few theoretical contributions of this dissertation to the literature regarding workplace motivation. Firstly, co-worker friendship and leadership-member relationships might further enhance further our understanding of motivational processes. Although there is a theoretical framework related to the contribution of the workplace friendships to the motivation, no empirical study has relatively yet to look at the direct impact of their relations between motivation and WF. Thus, the thesis might fill in the gap of the lack of literature, to some extent,

Secondly, this thesis provides also empirical evidence for discovering an association between LMX and autonomous motivation relationships (intrinsic and identified motivation). To date, the literature engaged in human needs-LMX relationships however, no study yet looked at the direct impact of LMX-autonomous motivation. Thus, the literature relatively suffered from lacking in studies that investigate LMX-autonomous motivation relationships. We discovered a linkage between employee's self-reports of LMX and autonomous motivation.

Thirdly, this thesis looked at an interaction effect (personality dimension and personality) on LMX-autonomous motivation and WF-autonomous motivation relationships. Although the most hypotheses are not met regarding the moderation effect on motivation. This not means that investigations of personality and mindfulness should be abandoned. Besides, the influence of conscientiousness and mindfulness cannot be denied in the current study. This study suggests more detailed exploration need should be for the future study and this finding is likely to arouse interest on the researcher to discover further

Finally, the motivational process depended on numerous variables such as content (human need, personality), context (WF, LMX) and process (mindfulness) in the current study. It can be said that the dissertation examined the motivation in a broader framework

#### **5.4. Practical Implications**

I have a notion that science could be as valuable as it contributes to the society as practically, however, the most valuable practical knowledge spring from theoretical knowledge. Thus, this project could be utilised for employee relations and motivation which is one of the main Occupational psychology areas (BPS, 2012) by practitioners. Additionally, the steering group in the organisation should discuss our practical implementation, work and managing at every team meeting for increasing employee participation (Nielsen et al., 2013).

##### ***5.4.2. Leader-Member exchange (LMX).***

One of the main findings is that LMX predict autonomous motivation. First, leaders should attempt to improve high LMX relationships in the workplace (Graen & Uhl-Bien, 1995). However, this may take time and requires social exchanges and also there are some difficulties for implementation. E.g. material resources, time constraints for the leader (Van Breukelen et al., 2006).

Secondly, to develop high LMX, the ability of a leader regarding social relations is not enough but also require behaving their employees with procedurally fair and unbiased (Hooper & Martin, 2008). Otherwise, using punitive strategies to deal with problems of employees might lead a counterproductive performance, in turn, low LMX quality (see Atwater & Elkins, 2009). It is recommended that structural barriers to LMX improvement should be removed to use correct strategies. For instance, building small groups, increasing the leader's time (Martin, Guillaume, Thomas, Lee & Epitropaki, 2016).

Finally, the meta-analysis studies showed that leadership training concerning the LMX is a beneficial effect on performance (Graen, et al., 1982). A training program aimed at understanding employee perspectives is designed for managers to develop autonomy supportive work settings showed that there is an increase in trust in the organisation, high-quality supervision and job satisfaction (Deci, Connel & Ryan, 1989).

### **5.3.2. Workplace friendship.**

Another finding is that WF is one of a strong predictor of autonomous motivation. Organisations might do many things to create workplace friendship opportunities. Firstly, teamwork allows employees to work closely and this lead to share an experience and information which might be the first stride of being friends. Furthermore, managers should promote an environment that enables employee's openness and friendship (Rousseau 1995). To do this, managers should learn how to establish a trusting relationship and then organisations should provide training which aimed to develop a social relationship among employees (Hallowell, 1999).

Another option would be some social event such as "dress down" Fridays allowing employees to have friends. However, along with social events, openness and friendliness should be promoted by organisations (Berman, West & Richter, 2002). Authors also mentioned WF might cause to various challenges of relationships among people. For instance, envy, competition, gossip and office romance. However, they recommended training consisted of active listening, expressing thoughts and emotions to overcome the challenges.

Furthermore, (Bar-on, 1992) supported this opinion that friendships risk could be manageable by training or a workplace policy (see Berman, West & Richter, 2002). Regarding this, I recommend transactional analysis (TA) training which useful and applied model practically in the wide range of contexts for effective communication and conflict solution

because TA could develop employees or leader's ability regarding management of interpersonal relationships

### **5.3.3. Mindfulness and Personality Dimensions**

One of the findings is that Conscientiousness has a moderation effect on the relationships between LMX and identified motivation and also both mindfulness and conscientiousness are a negative predictor of amotivation. This research suggests a few practical implications for the organisation. The aim of the practical implementation is to increase mindfulness level on employees and leaders.

Usually studies recommend that mindfulness level of leaders and supervisor' might be increased through mindfulness training which is particularly well adapted to the workplace (e.g. Young, 2017). Studies conducted in the past suggested some practical implementations such as meditation is designed for increasing mindfulness (Brown & Ryan, 2003). This training also causes positive change in emotion, behaviour and neural systems which is responsible for self-regulation (Cahn & Polich, 2006). One interesting finding related to mindfulness, it provides mutual benefits to group members in organisations. In other words, as there has been an increase in mindfulness level of leaders or supervisors, their followers have benefitted from them (Sutcliffe et al., 2016).

When the personality of employees or leaders are considered, this dissertation might provide a benefit for personnel development. Especially, some traits might be seen more attractive (e.g. extraversion, conscientiousness), however, the measurement of traits were challenging, complex and diverse (Chu, Lee, Huang & Ling, 2013). Therefore, we recommend that personality features could be utilised for predicting performance rather than measure

### **5.4. Limitation and Future Directions**

This dissertation was ambitious in aiming to consider a wide variety of factors regarding motivation theories. Therefore, it was based on an extensive literature review and included the considered valuable factors affecting motivation.

Although the sample size is deemed as adequate within the dissertation, it is not particularly large, because scholars recommend that sample sizes should average between 200 and 300 for conducting dissertation research (Devellis, 2014). Furthermore, social demographic features are not distributed well (e.g. gender, management level). The results are therefore not generalisable to the rest of the population or an organisation. Therefore, we suggest that future

studies should examine the relevant study in a larger group, with balanced and heterogeneous samples across different companies.

Five subdimension of BIF-10 scale did not demonstrate adequate reliability (.70). Shorter scales may provide lower reliability. However, some subdimensions that have reliability smaller than .50 had to exclude from the statistical model. Exclusion of this subdimensions limited our study to measure some personality constructs. Questionnaires with higher internal consistency are significant for the future research.

This dissertation has a common limitation regarding methodological perspective. First, a self-report survey data questionnaire relies on accurate responses and insights of individuals. This is likely to cause the relationships between constructs that might be inflated by social desirability bias, because individuals could obscure accurate relationships, and demonstrate a false relation between constructs.

Second, this study is not an experimental and controlled study, but rather a quantitative study administered through a questionnaire. Therefore, there could be uncontrolled confounding variables that have an excessive impact on the study. For example, prior studies show that leader's reputation and closeness, or perceived similarity between leader and follower, could influence LMX quality.

Third, the quantitative method assumes specific ontological, epistemological, and philosophical assumptions. However, not all scholars accept the assumptions taken as the basis for this quantitative study. For instance, constructionist and interpretive positions believe that the perception of the researcher could manipulate the reality of the results (Merriam, 1998), which is not tangible and measurable. Contrary to this, the constructs of motivation in this study were measured and, therefore this dissertation did not adopt the constructionism approach. Therefore, it would be beneficial to conduct a mixed study (particularly based on a complementary strategy) to comprehend an alternative perspective towards this subject and whether or not the findings of the dissertation are affected by the methodological approach. Fourth, the dissertation also could not establish a causality due to the limited cross-section of the study. Therefore, longitudinal research could be needed to determine issues of causality.

This dissertation has some limitations that are common to STD and LMX studies. First, the association between each variable and motivation is grounded in Self-determination Theory. The impact of WF and LMX could be examined in different theories (e.g. Path goal theory, Herzberg, Leonard Integrative taxonomy, Alderfer's relatedness needs). Second, this

dissertation focused on the employee's perspective of the leader-member exchange; it did not take account of the leader's opinion. Further studies might take into account obtaining data from leaders and employees to gain more comprehensive insight into LMX quality. Finally, this dissertation did not consider the difference in culture. Western countries might be individualistic more than collectivistic eastern countries (Naugarou, 2017). Therefore, cultural differences in relationships between leader and employees might lead to more different need satisfaction and autonomous motivation insights (Graves & Luciano, 2013).

## **5.5. Conclusion**

In conclusion, a quantitative study was conducted to investigate on the role of the leader and friend relationships in the workplace in understanding self-determined motivation among employees. This dissertation tested a model of the linkages between LMX, WF, and Self-determined motivation. Besides, moderation role of mindfulness and personality on the suggested relationship in the current study. After collected data through questionnaires, numerous findings were found. Results showed that LMX and WF can predict intrinsic motivation and identified motivation separately. Regarding to the moderating relationships, only conscientiousness was shown to have a moderation effect on the direct relationship between LMX and identified motivation. The findings of this research provided insights for understanding friendship and leader relationships with employees and practical implementations for each variable were recommended.

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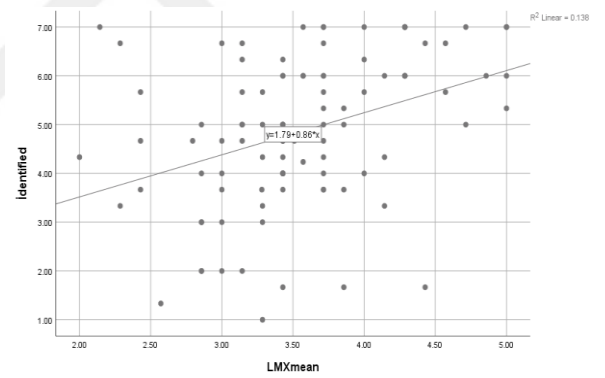
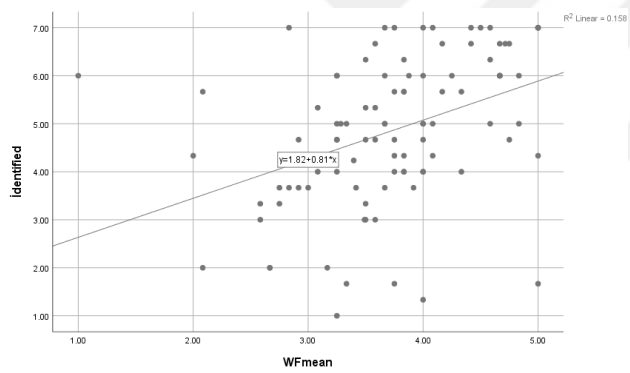
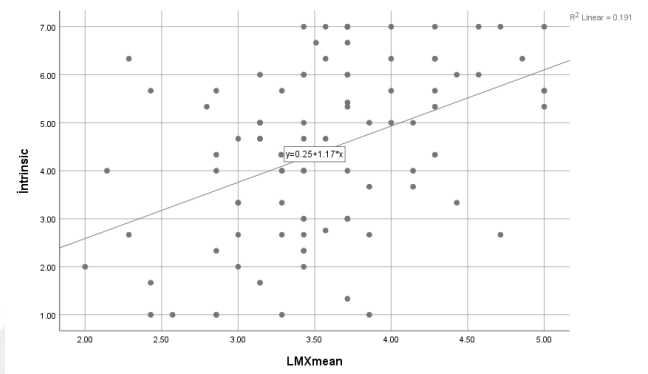
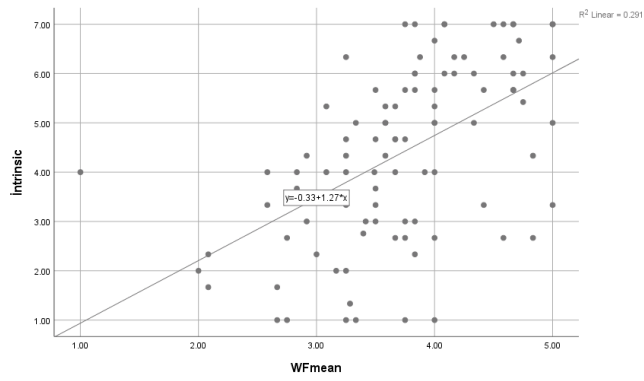
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## Appendices

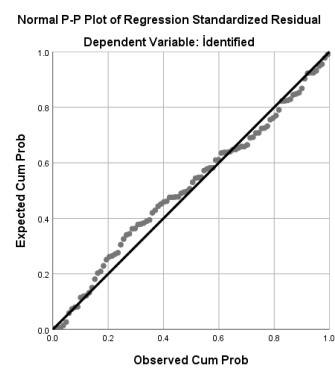
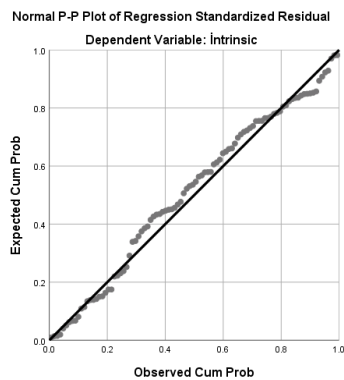
## Appendix A



## Appendix B

### Descriptive of Skewness and Kurtosis values

	Mean	Std. Deviation	Skewness	Kurtosis
Extraversion	2.9651	1.06281	.155	-.599
Conscientiousness	3.8769	.87597	-.465	-.757
Neuroticism	2.4792	.99715	.205	-.960
LMX mean	3.5507	.66295	.176	-.025
Mindfulness	3.6854	1.08181	-.404	-1.028
WF mean	3.7319	.75519	-.567	.918
Amotivation	2.4653	1.56906	.876	-.341
Extrinsic Motivation-Social	3.5451	1.60563	.027	-.950
Extrinsic Motivation-material	4.1181	1.41587	-.324	-.289
Introjected Regulation	4.2904	1.51142	-.326	-.408
Identified	4.8566	1.54333	-.499	-.392
Intrinsic	4.4046	1.77530	-.275	-.942



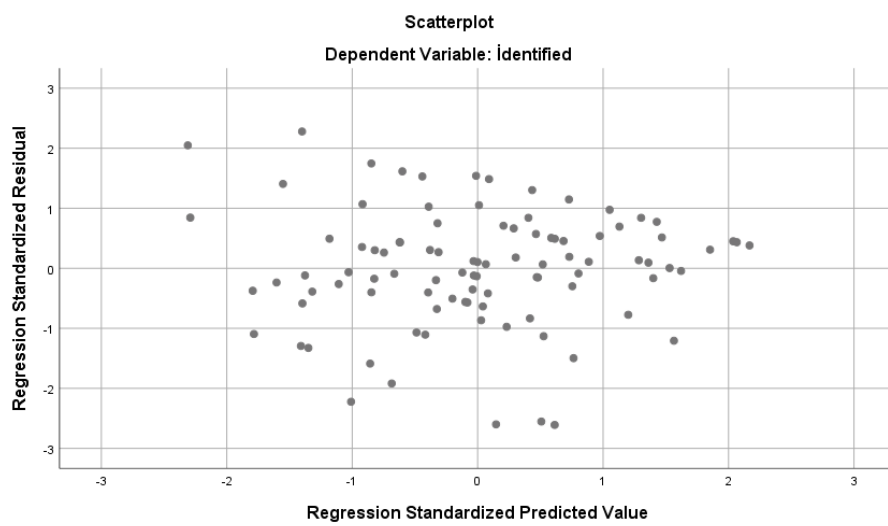
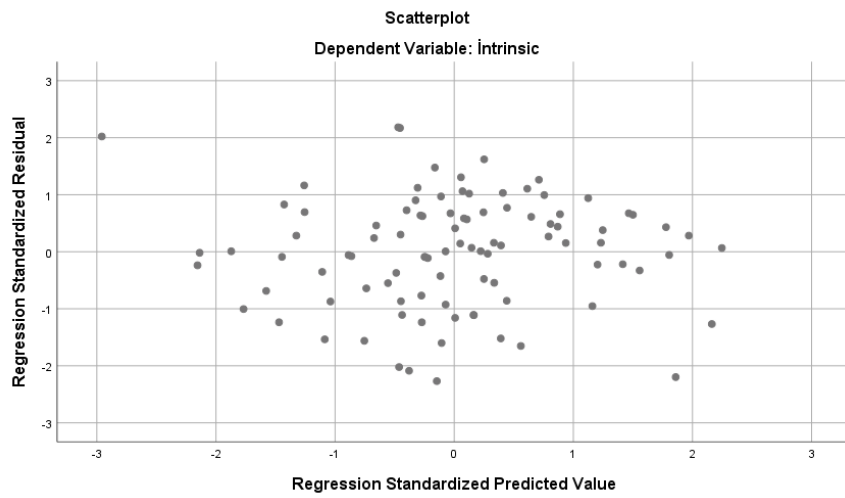
## Appendix C

*Table 8. Multicollinearity test for regression analysis*

	B	Std. Error	Beta	t	sig	Tolerance	VIF
(Constant)	.369	1.328		.278	.782		
Extraversion	.365	.154	.218	2.369	.020	.804	1.244
conscientiousness	-.310	.193	-.153	-1.602	.113	.750	1.333
Neuroticism	-.194	.170	-.109	-1.141	.257	.746	1.340
LMX-mean	.570	.279	.213	2.046	.044	.630	1.586
Mindfulness	-.149	.156	-.091	-.959	.340	.756	1.323
WF-mean	.848	.248	.361	3.417	.001	.612	1.633

Dependent Variable: Intrinsic Motivation

## Appendix D



## Appendix E

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.2872	7.1082	4.4046	1.15262	96
Std. Predicted Value	-2.705	2.346	.000	1.000	96
Standard Error of Predicted Value	.189	.657	.365	.093	96
Adjusted Predicted Value	.5147	7.3319	4.3966	1.18351	96
Residual	-3.47142	3.34977	.00000	1.35024	96
Std. Residual	-2.488	2.401	.000	.968	96
Stud. Residual	-2.671	2.503	.003	1.013	96
Deleted Residual	-3.99856	3.63872	.00798	1.48115	96
Stud. Deleted Residual	-2.769	2.581	.001	1.026	96
Mahal. Distance	.745	20.066	5.937	3.510	96
Cook's Distance	.000	.198	.014	.030	96
Centered Leverage Value	.008	.211	.062	.037	96

a. Dependent Variable: Intrinsic

## Appendix F. Ethical Approval



Downloaded: 03/09/2018

Approved: 27/06/2018

Ali Sen

Registration number: 170217846

Management School

Programme: Master Dissertation

Dear Ali

**PROJECT TITLE:** Title: An examination of the moderation role of personality and mindfulness on the association between the interpersonal relationships (Leader-Member Exchange and Workplace friendships) and motivation.

**APPLICATION:** Reference Number 018448

On behalf of the University ethics reviewers who reviewed your project, I am pleased to inform you that on 27/06/2018 the above-named project was **approved** on ethics grounds, on the basis that you will adhere to the following documentation that you submitted for ethics review:

- University research ethics application form 018448 (dated 26/06/2018).
- Participant information sheet 1045209 version 3 (26/06/2018).
- Participant consent form 1045207 version 3 (21/06/2018).

The following optional amendments were suggested:

*Please include your supervisors contract details on the information sheet (name & email address)*

If during the course of the project you need to [deviate significantly from the above-approved documentation](#) please inform me since written approval will be required.

Yours sincerely

Lucy Bartrick  
Ethics Administrator  
Management School

■

## **Appendix G. Information Sheet**

### **The impact of employees' workplace relationships on the motivation**

Dear participants,

'You are being invited to take part in a part of my dissertation project. Before you decide whether or not to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.'

#### **What is the purpose of the study?**

The aim of this study is to understand "the impact of the workplace relationships of employees on workplace motivation". Besides, how does self-awareness level and personalities of employees contribute to the subject

#### **Why have I been invited to take part?**

You have been invited to take part in this study because you have a relationship with your supervisor (leader) and a co-worker in your business. I am looking to recruit about 250 participants for this study. Unfortunately, you will be unable to take part if any of the following apply: You do not have at least a co-worker and a supervisor (leader) at work.

#### **Do I have to take part?**

Participation is voluntary. You do not have to take part. You should read this information sheet and if you have any questions you should contact me. You should not agree to take part in this research until you have had all your questions answered satisfactorily.

#### **What will happen to me if I take part?**

If you decide to take part, you will be given this information sheet to keep and will be asked to sign a consent form. At a time, convenient for you, you are going to fill out the only five surveys including 100 questions in total. These surveys will take around 15 minutes to complete. Please answer each question honestly and with careful consideration. There is neither right or wrong answers nor appropriate answers. So, you should answer the questions as much as you can to get more reliable results,

**What are the possible risks of taking part?**

There are no foreseeable risks in participating in the study. The main disadvantage to taking part in the study is that you will be donating around 15 minutes of your time to take part. Furthermore, the responses you make in the questionnaire will be kept CONFIDENTIAL and ANONYMOUS. All the data collected will be used for only academic purpose. It is possible that you may find the questions is unclear.

**What are the possible benefits of taking part?**

There are no direct benefits to taking part. However, the information I get from the study will help to increase the understanding the relationships between motivation and interpersonal relations in workplace. Furthermore, if you request I will provide you with a summary of a final report describing the main findings, including good practice and innovative initiatives in your organisations

**Will my taking part be kept confidential?**

The data that you provide sets is regarded as strictly confidential and will be held securely until the research is finished. Your participation is entirely voluntary. If you change your mind, you are free to stop your participation and to have your data withdrawn without giving any reason. All data for analysis will be anonymised. In reporting on the research findings, I will not reveal the names of any participants or the organisation where you work. At all times there will be no possibility of you as individuals being linked with the data.

**What is the legal basis for processing my personal data?**

According to data protection legislation, we are required to inform you that the legal basis we are applying in order to process your personal data is that 'processing is necessary for the performance of a task carried out in the public interest

**Who is the Data Controller?**

The University of Sheffield will act as the Data Controller for this study. This means that the University is responsible for looking after your information and using it properly.

**What will happen to the results of the study?**

I will disseminate the research findings through my master dissertation the UK

**What if something goes wrong?**

If you have any questions or require more information about this study, please contact me using the following contact details:

Mr Ali SEN, MSc Student

University of Sheffield, Sheffield S3 7TQ

[pskalisen@gmail.com](mailto:pskalisen@gmail.com)

[asen1@sheffield.ac.uk](mailto:asen1@sheffield.ac.uk)

**Please retain this information sheet and the signed consent form.**

**Thank you for reading this and considering participation in my research project**



**Appendix I. Demographic Characteristics**

1. **Gender:** Female ( ) Male ( )
  
2. **Age:** .....
  
3. **Education Level:** High school ( ) Bachelors degree ( ) Master's degree ( )
  
4. **Job Type (e.g. medical, business, arts):** .....
  
- 4 **Tenure:** .....
  
- 5 **Management Levels (e.g. middle manager, team member, task supervisor)**  
.....
  
- 6 **Hours of Work in a week :**
  
- 7 **Team Work Experience:** Yes ( ) No ( )
  
- 8 **Working Status:** Temporary ( ) Permanent ( )

**Appendix J. Big Five Inventory-10 (BFI-10)**

Instruction: How well do the following statements describe your personality?

<b>I see myself as someone who ...</b>	<b>Disagree strongly</b>	<b>Disagree a little</b>	<b>Neither agree nor disagree</b>	<b>Agree a little</b>	<b>Agree strongly</b>
... is reserved	(1)	(2)	(3)	(4)	(5)
... is generally trusting	(1)	(2)	(3)	(4)	(5)
... tends to be lazy	(1)	(2)	(3)	(4)	(5)
... is relaxed, handles stress well	(1)	(2)	(3)	(4)	(5)
... has few artistic interests	(1)	(2)	(3)	(4)	(5)
... is outgoing, sociable	(1)	(2)	(3)	(4)	(5)
... tends to find fault with others	(1)	(2)	(3)	(4)	(5)
... does a thorough job	(1)	(2)	(3)	(4)	(5)
... gets nervous easily	(1)	(2)	(3)	(4)	(5)
... has an active imagination	(1)	(2)	(3)	(4)	(5)

## Appendix K. The Mindful Attention Awareness Scale (MAAS)

Instructions: Below is a collection of statements about your everyday experience. Using the 1-6 scale below, please indicate how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be. Please treat each item separately from every other item.

0	1	2	3	4	5	6
not at all		somewhat			very much	

- \_\_\_\_\_ 1. I was finding it difficult to stay focused on what was happening.
- \_\_\_\_\_ 2. I was doing something without paying attention.
- \_\_\_\_\_ 3. I was preoccupied with the future or the past.
- \_\_\_\_\_ 4. I was doing something automatically, without being aware of what I was doing.
- \_\_\_\_\_ 5. I was rushing through something without being really attentive to it.

## Appendix L. LMX-7

**Instructions:** This questionnaire contains items that ask you to describe your relationship with your leader. For each of the items, indicate the degree to which you think the item is true for you by clicking one of the responses that appear below the item.

The following questions ask about **your relationship with your immediate boss**, i.e. **the person you report to**. Circle your answer.

1. Do you know where you stand with your leader. do you usually know how satisfied your leader is with what you do?

1	2	3	4	5
Rarely	Occasionally	Sometimes	Fairly often	Very often

2. How well does your leader understand your job problems and needs?

1	2	3	4	5
Not a bit	A little	A fair amount	Quite a bit	A great deal

3. How well does your leader recognize your potential?

1	2	3	4	5
Not at all	A little	Moderately	Mostly	Fully

4. Regardless of how much formal authority he/she has built into his/ her position, what are the chances that he/she would use his/ her power to help you solve problems in your work?

1	2	3	4	5
None	Small	Moderate	High	Very high

5. Again, regardless of the amount of formal authority he/she has, what are the chances that he/she would “bail you out,” at his/ her expense?

1	2	3	4	5
None	Small	Moderate	High	Very high

6. I have enough confidence in my leader that I would defend and justify his/her decision

1	2	3	4	5
Strongly disagree	Disagree	Neutral	Agree	Strongly agree

7. How would you characterize your working relationship with your Leader

1	2	3	4	5
Extremely ineffective	Worse than average	Average	Better than average	Extremely

## Appendix M. The Multidimensional Work Motivation Scale (MWMS)

“Why do you or would you put efforts into your current job?” and is accompanied by the scale: 1 = “not at all”, 2 = “very little”, 3 = “a little”, 4 = “moderately”, 5 = “strongly”, 6 = “very strongly”, 7 = “completely”. The scale can be obtained in other languages by contacting the first or second authors.

I don't, because I really feel that I'm wasting my time at work.

I do little because I don't think this work is worth putting efforts into.

I don't know why I'm doing this job, it's pointless work.

To get others' approval (e.g., supervisor, colleagues, family, clients ...).

Because others will respect me more (e.g., supervisor, colleagues, family, clients ...).

To avoid being criticized by others (e.g., supervisor, colleagues, family, clients ...).

Because others will reward me financially only if I put enough effort in my job (e.g., employer, supervisor ...).

Because others offer me greater job security if I put enough effort in my job (e.g., employer, supervisor ...).

Because I risk losing my job if I don't put enough effort in it.

Because I have to prove to myself that I can.

Because it makes me feel proud of myself.

Because otherwise I will feel ashamed of myself.

Because otherwise I will feel bad about myself.

Because I personally consider it important to put efforts in this job.

Because putting efforts in this job aligns with my personal values.

Because putting efforts in this job has personal significance to me.

Because I have fun doing my job.

Because what I do in my work is exciting.

Because the work I do is interesting



## **Appendix N. Workplace Friendships**

This questionnaire contains items that ask you to describe your relationships with your co-worker in your business. For each of these sentences, indicate on a 5-point scale (1= strongly disagree, 5= strongly agree).

### **Friendship opportunity**

1. I have the opportunity to get to know my co workers
2. I am able to work with my co-workers to collectively solve problems
3. In my organization I have the opportunity to talk informally and visit with others
4. Communication among employees is encouraged by my organization
5. I have the opportunity to develop close friendships at my workplace
6. Informal talk is tolerated by my organization as long as the work is completed

### **Friendship Prevalence**

7. I have formed strong friendships at work
8. I socialize with co-workers outside the workplace
9. I can confide in people at work
10. I feel I can trust many co-workers a great deal
11. Being able to see my co-workers is one reason I look forward to my job
12. I do not feel that anyone I work with is a true friend (R)

## **The impact of employees' workplace relationships on the motivation**

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### **What are the possible risks of taking part?**

### Demographic Characteristics

1. **Gender:** Female ( ) Male ( )
2. **Age:** .....
3. **Education Level:** High school ( ) Bachelors degree ( ) Master's degree ( )
4. **Job Type (e.g. medical, business, arts):** .....
- 4 **Tenure:** .....
- 5 **Management Levels (e.g. middle manager, team member, task supervisor)** .....
- 6 **Hours of Work in a week :** .....
- 7 **Team Work Experience:** Yes ( ) No ( )
- 8 **Working Status:** Temporary ( ) Permanent ( )