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Army Adventurous Training and the Internalisation of Core Values: How leadership behaviours affect the internalisation of motivational regulations – by Stephen Higgins

Summary

Adventurous Training (AT) within Army Phase One organisations is used to assist in the development of British Army recruit core values¹. This study measured the internalisation of British Army recruit core values during the AT week at two separate Phase One training organisations². A pre-test, post-test design was used to evaluate recruit (n = 302) motivational internalisation of core values during a structured 5-day training week, where recruits undertook a mixture of rock climbing, caving, canoeing, kayaking, and hill walking activities, and were required to complete tasks in unfamiliar and challenging environmental conditions. Reflecting the influence of the training, Bonferroni corrected, pair-samples, t-tests conducted on the Relative Autonomy Index were significant for the motivational internalisation of All core values and four of the six independent core values (Selfless Commitment, Courage, Loyalty and Respect for Others). Further examination at external, introjected and integrated regulations additionally revealed significant results for all core values with the AT week appearing to have the most robust effect on introjected regulation.

A second hypothesis was concerned with the effects of the leadership of AT instructors in developing recruit core values and asked specifically whether high levels of transformational leadership behaviours were associated with an enhanced internalisation of core values. Fifty nine instructors took part in the study and four transformational leadership behaviours³ were

¹ Selfless Commitment, Courage, Discipline, Integrity, Loyalty, Respect for Others.

² The Army Foundation College, (Harrogate), and the Infantry Training Centre, (Catterick).

³ Individual Consideration, Intellectual Stimulation, Fostering the Acceptance of Group Goals, and Contingent Reward.

hypothesised to be associated with greater gains in the internalisation of all core values. Analyses revealed mixed results regarding individual transformational leadership behaviours; however, individual consideration was found to be the most significant behaviour. The implications for training developments are discussed.

Key words

Transformational leadership behaviours, self-determination, core values

Introduction

The British Army's core values and standards are presumed to underpin the behaviour and actions of all soldiers within the British Army and are therefore expected to contribute directly to operational effectiveness. They are issued to every soldier as core qualities that are demanded in order to preserve the reputation and operational capability of the armed forces, and the support they engender. In the British Military Doctrine (2008), the Chief of the General Staff wrote, "*The British Army has a worldwide reputation for excellence...Our Values and Standards are vital to operational effectiveness – they are the lifeblood that sustains the Army.* With regard to the core values, the British Military Doctrine summarised operational effectiveness as "*how the Army is judged in peace and war, from platoon size (approx. 30-40 soldiers) to the highest levels. They are more than just words, we must believe in them and live by them.*" The core values are described by the Values and Standards of the British Army (Dannatt, 2008) to be about character and spirit - moral principles which all soldiers should use to help guide and develop them throughout their military careers. The core values serve as a starting point so all understand what behaviours and conduct are acceptable and should be emulated. They act as beacons vectoring people to the path of professional conduct (Colonel Homrig, 2001).

The Army's core values were introduced in 2000 as a formal expression of the qualities required by soldiers of the British Army, and the *Standards* (abiding by the law, appropriate behaviour, and professionalism) are the foundations on which soldiers should apply these qualities. As such, the core values themselves, Selfless Commitment, Respect from Others, Loyalty, Integrity, Discipline, and Courage, are all integrated into elements of Phase One training where their connection to core soldiering skills can be made.

The British Army does not give any of these core values an operational definition, but rather a descriptor that allows soldiers the opportunity to apply each one to any given scenario. In an overarching way, each soldier is expected to be able to 'do the right thing on a difficult

day', and Commanders of Army Units 'are expected to create a command ethos with core values at the centre of it' (Dannatt, 2008). The core values descriptions can be summarised as follows: *Selfless Commitment* – putting the needs of the mission and the team before personal interests; *Respect for Others* – no place for prejudice or favouritism, equality of treatment and opportunity; *Loyalty* – continuing allegiance, commitment and support to all that serve (expressed in the military covenant⁴); *Integrity* – honest and truthful, of unique significance to soldiering and essential to trust amongst comrades; *Discipline* – the primary antidote to fear and the maintenance of operational effectiveness, the need to obey all orders; *Courage* – both physical and moral courage to do what is right even when it may be unpopular or dangerous: the maintenance of the highest standards of decency and behaviour at all times.

Although military core values are not known to have undergone any scientific scrutiny, other academic research has identified that 'values' influence how one perceives stimuli and incentives in the environment, how one assesses situations and events experienced, and which goals and intentional efforts one chooses to pursue from day to day (Feather, 1992; Vroom, 1964). Values concern what one wants, pursues, or thinks important, and should be viewed differently from goals, which can be more readily related to objectives. 'Extrinsic' values, such as those related to financial success, physical attractiveness and social popularity are likely to be less satisfying of needs and growth strivings (Kasser, 2002), Notably though, many researchers (Rokeach, 1973; Schwartz, 1994; Inglehart & Baker, 2000) have not put any *value* on specific values, that is, to say which ones might be generally more justifiable or beneficial (Sheldon et al, 2010). The Army's core values are consistent with the moral virtues and ethical principles which might underpin any decent society (Wheeler, 2000). Given their central importance, there is clearly a need to better understand how the core values are brought into the congruent self and therefore become the driving force underpinning the behaviour of every soldier within the British Army. Soldiers

⁴ Soldiering – The Military Covenant, Army Doctrine Publications Volume 5 (2000). Soldiers will be called upon to make personal sacrifices – including the ultimate sacrifice, in the service of the Nation.

are expected to adhere to the British Army's *ethos* through imbedding the core values, and to put the interests of the team, the task, the unit, and the nation ahead of their own.

The ethos of the British Army is described as: *"That spirit which inspires soldiers to fight. It derives from, and depends upon, the high degrees of commitment, self-sacrifice and mutual trust which together are essential to the maintenance of morale"* (Army Doctrine Publication, Volume 5, (2000). The Army's core values are there to uphold this ethos, which is presumed to lead to sustained cohesion, which the Values and Standards (Commanders' edition, 2000) have stated forms the basis of a covenant between the Army and its soldiers.

Colonel Banham (2009), who was then the Chief of Staff, HQ Theatre Troops, suggested that the core values held an important relevance to the British Army, despite criticisms that might be levelled at them across society at large. He stated: *"the British Army's core values are antiquated, old fashioned, and out of date within society at large. However, the nature of the role, the peculiar pressures of the combat operating environment and the expectations that these bring with them tend to provide a relevance that is peculiar to the closed society that the Army represents... there is still a real need to instil the core values and standards that the Army demands, but that has to be reinforced by a structure of adherence, leadership and command."* Antiquated and without scientific research the core values may be, but they are there to guide and develop all individuals into the sort of soldiers they should be. Core values, adherence, leadership and command all remain necessary aspects of an important framework and as such, they are accorded the highest priority and are applied throughout both initial training and consistently thereafter. The British Army's leaders must therefore themselves lead by example, and reinforce these qualities for those under their charge at all times (e.g., Values and Standards, 2000, 2008; Commanders' Edition, 2000).

Strong extrinsic (as opposed to intrinsic) goal pursuit may often be weighed with more costs than benefits, and thus may backfire or fail to satisfy (Sheldon et al, 2010), and the concept of core values being given a greater connection to other elements of training may benefit

internalisation, including need satisfaction and well-being. The transformation from civilian to soldier is often a remarkable process to observe, and inculcating the core values is likely to be of early importance within training to support the development of mutual acceptance, affiliation, and team. To ensure Phase One training outputs standards that meet the requirements of entry into Phase Two training, the focus is fundamentally about the next objective, challenge, or goal. The development of and focus on values is harder to recognise, or indeed assess, and measuring the internalisation process in the short-term may have longer-term benefits.

The adventurous training phase

Adventurous Training (AT) is viewed as a valuable addition to formal military training that supports the development of British Army core values. It is additionally presumed to enhance an individual's ability to withstand the rigors of operations and rapid deployments. AT is defined by the Adventurous Training Group (Army) (2011) as *“Challenging outdoor training for Service personnel in specific adventurous activities, involving controlled exposure to risk, to develop leadership, teamwork, physical fitness, moral and physical courage, among other personal attributes and skills vital to operational capability”*. As with most definitions within the British Army there are many overlaps between leadership, values and operational enhancement. Phase One organisations (that are responsible for the initial training of all new soldiers in the British Army), have as such, structured the AT phase of training mid-way through the Phase One syllabus, when recruits are at a stage where they are presumed to be developing a stronger understanding of the core values through both their own developing military skills and the leadership exhibited by the instructors delivering the training. Once the first introductory 6-7 weeks of Phase One training have been completed, recruits will be well informed and practiced in basic military skills, as well as having been introduced to the Army's core values. The AT week follows this training period and it is the AT instructor who is expected to provide opportunities for recruits to further develop their understanding and application of the core values. With an often completely unknown

environment and stressful and testing situations, AT activities are expected to set a climate for achievement, where recruits can focus on internalising core values to a greater extent. Applying skills that have already been learned in the first half of Phase One training to real life situations may be beneficial, but these are secondary objectives and as such, the AT instructors are required to maximise recruit achievement by focusing on each individual's development, understanding, and application of core values. Activities, such as, squeezing through a tight caving space, relying on team mates to conduct an underwater kayaking rescue, or finding extra effort to reach the summit of a rock face or mountain top are all elements of AT that provide opportunities for this development. The present research aims to study the internalisation of core values with regard to this one particular aspect of training – the AT week. In addition, this research will assess the leadership role of the AT instructors in developing recruit core values and specifically - whether high levels of transformational leadership behaviours are associated with an enhanced internalisation of core values.

Self-determination Theory and Basic Psychological Needs

The theoretical framework by which the current study examines the internalisation of core values is *Self-Determination Theory* (Deci & Ryan, 1985; Ryan & Deci, 2000b). Self-Determination Theory (SDT) has become a major theory of human motivation that acknowledges the basis of extrinsic and intrinsic motivation, and details the factors that enhance or reduce these different types of motivation. Intrinsic motivation is defined as doing an activity 'for its own sake,' for the satisfactions inherent in the activity (Ryan & Deci, 2000a), and individuals who are intrinsically motivated have an inherent propensity to actively develop skills, engage in challenges, and sample related new activities without any external prompts or rewards. Recruits in Phase One military training may be intrinsically motivated towards some aspects of training (such as certain types of fitness development or particular technical skills that they have found to be more enjoyable), but there are long periods of hard work and difficult challenges that are a necessity of military training that are far less likely to be 'enjoyable'. With the additional conformity requirements of a discipline

orientated organisation, often those activities that might be perceived as enjoyable are delivered in a more controlling way, especially with task and skill success for each individual recruit being the priority of Phase One training. Recruits need to be able to stay motivated towards the development of all training needs throughout the hardships endured: conditions that support improved recruit motivation and foster rather than undermine them achieving their true human potential are believed to optimise individual development. SDT research is directly concerned with these issues (Deci & Ryan, 1985, 1991; Ryan, 1995). Using empirical processes, Deci and Ryan (Ryan & Deci, 2000b; Deci & Ryan, 2002) have identified three basic psychological needs – the needs for *competence* (Harter, 1978; White, 1963), *relatedness* (Baumeister & Leary, 1995; Reis, 1994), and *autonomy* (deCharms, 1968; Deci, 1975) – that they argue are essential for optimal functioning, psychological growth and integration, as well as for constructive social development and personal well-being.

Competence refers to a sense of effective interaction within the environment and being able to meet optimal challenges (Tessier et al., 2010) and, for Phase One recruits, feeling effective in their training related interactions. Competence must be experienced for any motivation to occur, be it extrinsic or intrinsic (Ryan & Deci, 2007) and Phase One training uses progressive recruit development to support enhancing competence. *Relatedness* represents interpersonal acceptance and closeness (Deci & Ryan, 2000, Deci & Ryan, 2008), and concerns feeling connected to, and cared about, by important others. This includes a sense of mutual respect and trust for others (Baumeister & Leary, 1995), important aspects of the working environment within the military. *Autonomy* refers to feeling oneself to be the agent of one's action and experiencing identification with one's actions (Hofer & Busch, 2011): feeling the 'origin' as opposed to the 'pawn' of one's actions (Tessier et al., 2010). For the military environment, acceptance of autonomy at all levels may be viewed with scepticism within such a structured hierarchal organisation. Training military instructors to be more autonomy supportive, to allow for recruits to develop autonomous

behaviour in line with training parameters may prove to be the greater challenge, especially as there is a need for soldiers to be able to operate more technological equipment, and be more independent as well as interdependent in complex operational conditions.

Each of the three basic psychological needs are stated to play a necessary part in optimal development and SDT suggests that none can be thwarted or neglected without significant negative consequences (Deci & Ryan, 2000). Vansteenkiste et al., (2004) identified that presenting tasks in terms that are consistent with the satisfaction of the basic psychological needs (whether via the content or the context of the task) led to positive learning-related outcomes. Previous research has, however, *weighted* each of the three psychological needs differently. Indeed, although Cognitive Evaluation Theory (CET) was presented by Deci & Ryan (1985) as a mini-theory within SDT to specify the factors in social contexts that produced variability in intrinsic motivation, Ryan & Deci (2000c) specified that the tenets of CET have a primary focus on the *feelings of competence* accompanied by *a sense of autonomy*. Markland (2009) stated that self-determination theory contrasts extrinsic behavioural regulations (which vary in their degree of autonomy), with amotivation and intrinsic motivation. He argued that the most internalised form of extrinsic motivation could be classified as *autonomous*, and highlighted that only intrinsic motivation was *fully self-determined*. However, Hofer & Busch (2011) argue that individual differences in need strengths should reflect the association of need satisfaction and well-being: an individual high in a need for competence will benefit more in terms of well-being if this need was met – a factor they state is not considered in SDT research (Deci & Ryan, 2000, 2008). SDT also proposes the needs for competence and relatedness to be universal (Deci & Ryan, 2000; Sheldon et al., 2001). Consequently, CET makes no allowance for the possibility that an individual's need strength and subsequent need satisfaction/well-being are likely to be different between individuals. Deci et al. (1991) have stated that supports for competence and for relatedness facilitate motivation; however, according to Deci et al., such support will facilitate intrinsic motivation and integrated internalisation only to the extent that they are

accompanied by autonomy-supportive rather than controlling interpersonal contexts. In conclusion, individual differences in need strength remains an issue for SDT researchers to resolve.

The Army's Phase One training requires all recruits to reach the levels of *competency* necessary to achieving output standards for entry into Phase Two training. In addition, *relatedness*, which is often linked to interaction with partners and relationship commitments (LaGuardia et al., 2000) is considered important within the military community, as all individuals need to learn how to function as part of a well-organised team with the potential to operate effectively in situations with life threatening consequences on operations. The concept of *autonomy* (and therefore the potential for fully self-determined behaviour) is still believed by the present researcher to remain the greater challenge in the internalisation process. Transactional 'carrot and stick' training approaches are still used by some military instructors, so that 'releasing potential' in recruits in Phase One training requires, for some, a shift in both motivational education and training philosophy.

The three basic psychological needs (competence, relatedness and autonomy) are supported through interactions with key people in a given context and it is the AT instructor that potentially plays a key role in this regard for recruits during the AT week. The quality of these interactions has been labelled the 'motivational climate' (Ames, 1992) and it is this motivational climate that may or may not foster autonomous motivation. Previous research into support by those in a coaching role (including parents) has demonstrated that it can foster autonomous motivation in adolescents, which in turn increased their persistence in sports (Pelletier, et al., 2001). Black & Deci (2000) also found that students who perceived their leaders as more autonomy supportive performed better in an introductory chemistry course. Interestingly, although SDT proposes that satisfaction of all three basic psychological needs is necessary for effective internalisation and for psychological growth, integrity, and well-being (Deci & Ryan, 2000), the research focus *appears* to have been strongly weighted towards the need for autonomy. Indeed, Ryan & Deci (2000a p. 208) felt

the need to state that 'autonomy does mean self-determination', and earlier research made reference to a continuum of autonomy, or *self-causality* (Ryan & Connell, 1989) – not all three basic psychological needs. Other researchers, including Reeve, Nix, & Hamm (2003) used the term *self-determination* to refer to the subjective experience that reflects the underlying theoretical concept of autonomy, and recognised a different, though still important contribution made by the experiences of perceived competence. Deci (1980) adopted the term *self-determination* to differentiate autonomous intentions from controlled intentions, and according to Deci & Ryan (1987) autonomy connotes an inner endorsement of one's actions (origin, personal causation, and internal locus of causality) – these have been suggested to be the foundations of self-determination. If optimal motivational functioning is achieved with the satisfaction of all three needs, their related bearing appears to be different with autonomy greater in prevalence. Autonomy is agreed to be, as Carver & Scheier are cited as suggesting in Ryan & Deci (2000a p. 330), "self-direction, self-determination – plain and simple". Volition and integrated self-regulation are central to autonomy and according to the SDT approach a regulation that has been internalised without any volition may only be introjected. This could leave an individual only feeling satisfaction of their need for competence and relatedness, and autonomy is the critical element for increasing their motivational internalisation according to Ryan & Deci (2000b, p. 64). In conclusion, competence and relatedness are therefore suggested to *support* the internalisation of self determined behaviour, rather than represent an equal importance to that of autonomy. Without autonomy the internalisation process appears to be limited and fully self determined behaviour cannot be achieved. This research does not differentiate between each basic psychological need, but important question for future SDT research are raised.

Motivational internalisation

SDT suggests turning first to individuals' immediate social contexts and then to their developmental environments to examine the degree to which the basic psychological needs are supported, as contexts supportive of competence, relatedness and autonomy have been

found to foster internalisation and integration (Deci, 1980). Earlier motivation research (e.g., deCharms, 1968) proposed a bipolar intrinsic-extrinsic continuum of motivation and as a second mini-theory of SDT, *Organismic Integration Theory (OIT)* (Deci & Ryan, 1985; Ryan & Connell, 1989) provided a theory of internalisation and integration of regulations, which was formulated to explain the development and dynamics of extrinsic motivation; specifically, how an individual experiences increased levels of autonomy whilst engaging in extrinsically motivated behaviours (including the organisational processes and values taken on).

According to OIT, people are inherently orientated to assimilate and internalise social regulations (Chandler & Connell, 1987), and Ryan & Deci (2006) proposed that the reasons why individuals choose to participate, exert effort, and persist in an activity can be classified along a continuum of self-determined behaviour, rather than the original bipolar view of intrinsic-extrinsic motivational orientation. Deci & Ryan (1985) proposed four main types of extrinsic motivation: external regulation, introjected regulation, identified regulation, and integrated regulation.

External Regulation is when someone is controlled by external rewards or to avoid punishment. Their actions have an external perceived locus of causality (EPLOC) and it is the type of motivation focused on by operant theorists (e.g., Skinner, 1953). Examples include threats, deadlines, direction, external pressures, and tangible rewards, all of which have been identified to have an EPLOC (Deci & Ryan, 1985). *Introjected Regulation* is the first stage of the internalisation process, where individuals take prompts from their environment and bring them inside themselves. Introjection deals with past external contingencies that have been internalised inside the person, the person acts out of obligation, in order to avoid feeling shame and internal pressure. Introjection represents regulation by contingent self-esteem (Deci & Ryan, 1995), and is associated with other benefits such as, improved satisfaction and vitality; 'well-being' can be seen to be positively affected. A classic form of introjection is ego involvement in which people are motivated to demonstrate ability (or avoid failure) in order to maintain feelings of worth (deCharms, 1968;

Ryan, 1982). *Identified Regulation* is a much more autonomous or self-determined form of regulation. The person has identified with the personal importance of a behaviour and has thus accepted its regulation as his or her own (Ryan & Deci, 2000b). Although identification implies some perceived choice, the choice to engage in some activities is not necessarily coherent with other self-structures, thereby causing internal conflict. Regulation through identification reflects a conscious valuing of a behavioural goal or regulation, such that the action is accepted or owned as personally important. Ryan (1995) and Vallerand (2001) have suggested that identified regulation is likely to be more relevant than intrinsic motivation to the maintenance of behaviours that are not inherently interesting or enjoyable. *Integrated Regulation* is the most internalised form of external motivation, and it occurs when identified regulations are fully assimilated and fully internalised with the self, thereby resolving any conflict with other values. It involves both identifying with the importance of the behaviour(s) and integrating those identifications with other aspects of the self (Deci & Ryan, 2000): The result is self-determined extrinsic motivation.

For a behaviour to be internalised through identified or integrated regulations, Deci & Ryan (2000) and Ryan, Deci & Grolnick (1995) suggested that an individual *must* experience autonomy, a sense of volition and choicefulness, rather than coercion and pressure to engage in an activity. They further suggested that if the social environment is controlling, confrontational, or uninvolved, internalisation and autonomous motivation will be forestalled, leading to defensive behaviours and psychological withdrawal. It is interesting to note that perceived locus of causality (deCharms, 1968; 1976; Ryan & Grolnick, 1986) has been the most frequently portrayed quality of self-determination. More autonomous extrinsic motivation has been associated with more engagement (Connell & Wellborn, 1991), better performance (Miserandino, 1996), lower dropout (Vallerand & Bissonnette, 1992), higher quality learning (Grolnick & Ryan, 1987), and better teacher ratings (Hayamizu, 1997). Though not a form of motivation, it is important to note that SDT also identifies the state of *Amotivation* as literally lacking intention or without any motivation for an activity.

Amotivational behaviour includes those where an activity is not valued (Ryan, 1995), a primary lack of perceived competence (Deci, 1975), a belief that an activity is unimportant, and/or when an individual does not perceive contingencies between his/her behaviour and desired outcome(s) (Ryan & Deci, 2000b; Vallerand, 1997). Previous research has underscored the role of amotivation in dropping out of sport (Pelletier, et al., 2001) and physical activity (Ntoumanis, et al., 2004). The present research focuses on external regulation, introjected regulation, and an autonomous motivation composite, as it is very difficult, practically, to differentiate between identified and integrated regulation (e.g., Vallerand, Fortier, & Guay, 1997).

For recruits in Phase One training, the AT environment, by its very nature of being arduous, challenging and for many, a new experience, potentially provides an ideal climate for the internalisation of core values. It also involves activities that may be perceived as being outside of the normal (military-based) activities back in barracks and in military training locations. This is presumed to allow recruits opportunities to experience more autonomous motivation; however, the way in which AT instructors interact is likely to be very important in the satisfaction of the three basic psychological needs. Recruits gain new competencies in unfamiliar environments and the instructor that provides opportunities for development and makes the connections to other military settings should enhance feelings of individual competence. Teamwork is tested with activities that take individuals outside of comfort zones, where overcoming individual fears, as well as supporting others should bring about an improved sense of belonging and relatedness. Instructors that are more autonomy supportive with the activities and learning experiences, the way in which they provide feedback and give recognition, and their strategies for individual and team involvement, are expected to influence recruits' internalisation of core values.

Ryan & Stiller (1991) indicated as part of their research that intrinsic motivation has emerged as important for learning and achievement, and can be systematically catalysed or undermined by parent and teacher practices. It is important to note though, that recruits will

only become intrinsically motivated for activities that hold intrinsic interests for them and, although intrinsic motivation is clearly an important type of motivation, the majority of activities experienced by recruits within Phase One training are likely to be extrinsically motivating through the arduous Phase One training period. Recruits are expected to learn skills, take on roles, and assume responsibilities for uninteresting tasks with external direction: the core values are there to provide the character and “*life blood*” for this development; their leaders are there to provide an appropriate motivational climate, and support each and every recruit in internalising these core values. AT currently provides the challenging environment and associated perceived risks that are expected to facilitate this process.

Transformational Leadership

In military engagements, leadership, and its effect on morale, cohesion, and commitment, has long been identified as critical to unit performance (Bass, 1998; Gal, 1985). Greater attention should perhaps be paid to the organisational culture, the company’s mission and philosophy, and to the quality and form of leadership: Organisations that are recognised as having high levels of transformational leadership and a transformational organisational culture should attract better recruits (Bass & Riggio, 2006). Over the past few decades, transformational leadership has become one of the most widely used leadership models (Bass, 1985; Shamir et al., 1993; Kark & Shamir, 2002; Antonakis & House, 2002), and *Transformational Leadership Behaviours* could provide a theoretical framework by which the AT instructors support the motivational internalisation of the core values in recruits. Within the U.S. Army, their military doctrine (Field Manual 22-100) has stated that transformational leadership is at the core of military leaders exemplifying the highest levels of ethical and moral conduct. Transformational leaders are said to transform their follower’s basic values, beliefs and attitudes (Podsakoff, et al., 1996), and one of the central tenets of transformational leadership is that it is proposed to motivate groups and individuals to persist even when the conditions are unpredictable, difficult and stressful (Bass, 1985). AT

activities, by their very nature, provide the environment for unpredictable, difficult, and stressful situations, so that the link between the AT activities utilised in Phase One training and the leadership of the instructors in charge is therefore suggested to be of importance. Gal (1985) argued strongly that transformational leadership in the military is needed at all levels, and that commitment is a central concept in military motivation in contrast to the military's earlier emphasis on compliance through obedience. Gal (1987) stated that: '...obedience is gradually replaced by internalised patterns of behaviour that become autonomous...however, obedience is essential for good performance, efficiency, and mission completion'. Commitment, according to Gal (1985), is derived from one's own internalised sense of duty, responsibility, and conviction. These factors are presumed to be reflected in the British Army's core values and it is the leaders' responsibility to assist recruits in the development of these core values, which are reflected through followers' commitment to their training.

In contrast to transformational leaders, transactional leaders lead through a social exchange, Transactional leadership is based on *contingency*, in that reward or punishment is contingent upon performance – a transaction or exchange of something of value the leader possesses or controls that the follower wants in return for his/her services. Burns (1978) introduced the distinction between transactional and transformational leaders, and stated that transactionally led followers receive direct rewards (and punishments) for these exchanges with the goal of developing the followers to their fullest potential. In the leadership literature, transformational leadership and transactional leadership are not proposed to be at odds though with one another, but to complement each other based on each given situation. Walsman, Bass, & Yammarino (1990) stated: "The best leadership is both transformational and transactional. Transformational leadership augments the effectiveness of transactional leadership; it does not replace transactional leadership". Bass (1960) also suggested that the best leadership is both transformational and transactional, and Bass & Riggio (2006) stated that in some ways, transformational leadership is an expansion of transactional

leadership. Curphy (1992) reported that both transformational and transactional styles of leadership positively predicted the motivation, cohesion, and performance of U.S. Air Force squadrons, and even though research has supported the idea that transformational leadership is more effective than transactional leadership in generating extra effort, commitment and satisfaction in those led, constructive transactional leadership or contingent reward is reasonably effective under most circumstances (Avolio & Bass, 2002; Hardy, Arthur, Jones, et al., 2010). Bass et al. (2003) stated though, that many studies have reported that transformational, but not transactional leadership predicted performance improvements; i.e., Howell & Avolio (1993), and Geyer & Steyrer (1998). However, conditions that increase levels of uncertainty, challenge and stress were suggested to benefit from both transactional contingent reward and transformational leadership together. Bass et al. (2003) studied U.S. Army platoon leaders and sergeants and found both aspects of leadership equally predicted performance, and Hardy et al. (2010) provided evidence that in a military context Contingent Reward is at least as important a contributor to military performance as transformational leadership.

The most widely accepted measure of transformational leadership has been the Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 2000). However, its validity and factor structure have received mixed empirical support (e.g., Avolio, 2005). This has led researchers to adopt alternative approaches to the conceptualisation and measurement of transformational leadership. Antonakis et al. (2003) proposed that differentiated models allow for a more detailed examination of the differential effects of different sub-components of transformational leadership. With a need to recognise the structured military training conducted in Phase One training, the present study used a differentiated model of transformational leadership (Hardy et al., 2010; Arthur, Hardy & Wagstaff, 2010), which included the transactional leadership behaviour, Contingent Reward. Callow et al. (2009) also highlighted the importance of differentiated models in intervention work, as they allow for specific leadership behaviours to be targeted. They pointed out that specific leadership

behaviour effects cannot be revealed if a global model is used. The structural integrity of Hardy et al.'s (2010) full seven-factor model has been confirmed several times by confirmatory factor analysis.

Hardy et al.'s (2010) measure identifies six sub-dimensions of transformational leadership, together with Contingent Reward to provide individual scale measures (as well as a global construct measure). The seven sub dimensions are: *Inspirational Motivation* (Avolio & Bass, 1995) – articulating a positive vision of what is ahead, and inspiring the recruits by providing purpose and challenges to achieve the vision; *Individual Consideration* (Avolio & Bass, 1995) – paying special attention to each recruit's needs for achievement and growth, and demonstrating appropriate concerns; *Provide an Appropriate Role Model* (Podsakoff et al., 1990) – setting an example for the recruits to follow that is consistent with the values of both the leader and the recruit; *Fosters Acceptance of Group Goals and Teamwork* (Podsakoff et al., 1990) – leader behaviour aimed at promoting cooperation among the followers (recruits), getting them to work together towards a common goal, and developing teamwork; *Intellectual Stimulation* (Podsakoff et al., 1990) – leader behaviour that stimulates followers' efforts to be innovative and challenges old problems to be approached in new ways; *High Performance Expectations* (Podsakoff et al., 1990) – behaviour in the leader that demonstrates his or her expectations for excellence in followers; the seventh behaviour is the transactional leadership behaviour *Contingent Reward* (Podsakoff et al., 1990) – provision of positive reinforcement to followers in return for appropriate follower behaviour.

The short-term period (five training days) that recruits have to undertake the AT phase is predicted to improve the internalisation of military core values through the mediating effects of these transformational and transactional leadership behaviours exhibited by the AT instructors. However, the short time period allocated to the AT phase may have some limiting effects, and Hardy et al. (2010) suggested in their study that five weeks might be the minimum time for recruits to be able to provide an accurate account of their leaders' behaviours. Shamir et al. (1993) stated that transformational leadership may build on initial

levels of trust in the leader, and also argued that this trust may be associated with personal identification over longer periods of time. Bass et al. (2003) found that their short duration performance tasks may have led to transactional leadership being as predictive as transformational leadership. In addition and potentially relevant to this research, Barling et al. (1996) found that when leaders were more intellectually stimulating, subsequent followers' ratings were significantly higher for Intellectual Stimulation, but not for other leadership behaviours. Bass (1985) also argued that transactional leadership is more likely to be observed in a well-ordered society – something the military environment certainly is. It appears that transactional leadership is somewhat needed to establish clear standards and expectations of performance and contingent reward has been found to be reasonably effective in motivating others to achieve higher levels of development and performance (c.f., Antonakis et al. (2003).

To assess the utility of transformational leadership there was a need to consider which transformational leadership behaviours were most likely to be important within the context of the AT week. Of the seven sub-dimensions of leadership considered in this study, it was predicted that certain behaviours would be more relevant than others. With the increased levels of uncertainty, challenge and stress experienced by recruits during the AT week, as well as the structured military environment experienced throughout Phase One training, these behaviours were expected to have a greater impact on recruit internalisation of core values. As Bass (1985) identified, transformational leadership motivates both groups and individuals in difficult and stressful conditions and therefore both *Fostering the Acceptance of Group Goals and Teamwork*, and *Individual Consideration* were expected to impact on recruit performance and the internalisation of core values. Hardy et al. (2010) identified that both of these leadership behaviours, as well as *Contingent Reward* exerted a positive influence upon recruit performance in a military setting. In addition, Hardy et al. found that *Fostering Acceptance of Group Goals and Teamwork* to be the only leadership behaviour to predict task and social cohesion in a military context. Kark and Shamir (2002) also

demonstrated that transformational leaders are likely to increase group performance in that they are instrumental in overcoming social loafing among group members. During the AT week the majority of task performance is linked in some way to task cohesion, specifically how effectively the group work together in achieving each given task. The group sizes used during the AT week were established at a ratio of one instructor to six students, and as these were smaller groups than experienced throughout the majority of Phase One training⁵ there was an improved likelihood of AT instructors being able to focus on individual recruit needs.

Bass & Avolio (1994) stated that Intellectual Stimulation promotes intelligence, rationality and careful problem-solving, including new ways of examining how to complete assignments and the encouragement of re-thinking ideas. Bass (1994) also discussed improving team decision-making skills through the use of transformational leadership. The primary function of task-based challenges set within Phase One AT incorporates a considerable degree of problem solving, where recruits are required to think through challenges as both individuals and teams. The AT instructors utilised a selection of these environment and task-based scenarios to challenge the recruits mentally, as well as physically, and as such, *Intellectual Stimulation* was also hypothesised to benefit recruit internalisation of core values. Hardy et al.'s (2010) results do not necessarily support this hypothesis, as they found that all leadership behaviours *except* High Performance Expectations and Intellectual Stimulation significantly discriminated between pass and failure in Royal Marine recruit training. However, even though their study was undertaken within a British military training establishment, no data was recorded for the AT week specifically and its direct impact would not have been known. Podsakoff et al. (1990) also found in their study that Intellectual Stimulation was negatively related to trust and satisfaction. However, Chen & Tjosvold (2002) found that Intellectual Stimulation and team cohesiveness may benefit each other, whereby a team benefits from conflict in that the team develops a quality solution and

⁵ During Phase One training recruits are loaded into sections of 12 initially and the majority of training takes place as a whole section or in larger group sizes. This number only reduces if individuals leave training at any point.

strengthens relationships. Finally, Intellectual Stimulation can benefit an environment when questioning assumptions and inventing new for old processes (Bass, 1990).

Judge & Piccolo (2004) found that transformational leadership and the use of contingent reward have strong positive relationships to follower job satisfaction, satisfaction with the leader, and follower motivation, and although their study was on trained soldiers, (Bass et al., 2003) found that the correlation between Contingent Reward and performance was similar to that of their global measure of transformational leadership. *Contingent Reward*, as the only transactional leadership behaviour used within this study, was believed to be relevant for two reasons. First, military training requires clear standards and expectations of performance in training and these are required to be met by all recruits in training, however well they respond to the transformational leadership of their instructors. Contingent Reward would be expected to enhance this, with particular reference to the demonstration of values. Second, Phase One training forms part of a professional training package, designed through military doctrine and all soldiers are required to obey orders, however well executed they are. The public will always have high expectations for the British Army and the outcry over the poor leadership and core values exhibited in Camp Breadbasket in Iraq in 2003 was a strong example (Colonel Banham, 2009). However, this makes no allowance for the exceptions of war and the pressures of future combat that recruits need to be trained to undertake. Previous research (e.g., Hardy et al 2010) has consistently shown Contingent Reward to be a powerful predictor of recruit performance in a number of domains, including global pass-fail rates, and it is difficult to see how recruits could pass initial training without some internalisation of the Army's core values.

Conclusion – study direction

Previous field-based studies (Barling et al. 1996; Dvir et al. 2002; and Hardy et al. 2010) that have examined transformational leadership and its effects on follower outcomes have found a positive relationship between transformational leadership and followers. Cain (in press)

suggested that the connection between transformational leadership and the motivational internalisation of core values was about soldiers moving away from 'doing' Soldier things to 'being' a Soldier, and Jung & Sosik (2002) found that transformational leaders empower followers and improve follower satisfaction and commitment.

Transformational leadership builds trust between the leader and the follower and transformational leadership behaviours as previously assessed by Hardy et al. (2010) and Arthur et al. (2010) are proposed to improve the internalisation of recruit core values during the AT week. During this training time, recruits can be given opportunities for empowerment, helping them align their individual goals with that of the team and the greater organisation. All leaders within the British Army have a responsibility, through both rank and position, to elicit by their leadership, all the qualities of soldiering in their subordinates so as to achieve their purpose: A good military leader must know his soldiers, and they must know him. The British Army's core values are there to provide a sounding board for soldiers to make the right decision and apply the right behaviour. Even in adverse and unfamiliar conditions, and even though, not all core values can be developed equally during each aspect of Phase One training, the AT environment and its associated climate for achievement is predicted to be the ideal vehicle for this important aspect of initial recruit development. The present study examines the impact of AT on the internalisation of core values in a cohort of recruits. It also examines the degree to which internalisation is enhanced by AT instructors' use of certain (transformational and transactional) leadership behaviours (specifically, individual consideration, fostering acceptance of group goals and teamwork, intellectual stimulation, and contingent reward).

Method

Overview of Army Adventurous Training (AT)

The British Army is responsible for training civilians into trained military soldiers. Phase One Training includes the same training elements for all soldiers: fitness and robustness development, discipline and the inculcation of Army core values and standards; military skills and knowledge attainment; and preparation for the next phase in individual development based on the military trade being followed. The internalisation of military core values is therefore a fundamental part of becoming a soldier which underpins the British Army's *Ethos* and AT in Phase One training is designed to improve recruits' awareness and development of these core values.

The AT period in is one week (5 days) for soldiers. Each training day constitutes approximately 4-6 hours of activity time and recruits complete three separate activities during the week, which may include, single-pitch rock climbing and abseiling, canoeing and kayaking, caving and mountaineering. At each AT activity location used by the British Army Phase One establishments, specifically trained AT qualified instructors (ATIs) take recruits on all activities and are directly responsible for meeting all military training aims. These ATIs hold a mixture of military and nationally recognised AT qualifications, which support the delivery of AT. The training is set up so that recruits work with the same AT instructor throughout the entire AT week with a designed activity ratio of 1:6. Platoon/Troop staff that normally train the recruits throughout the 14-week Phase One training support activities and remain an integral part of recruit skill and attitude development throughout the week.

The British Army sets demanding training, strong leadership, comradeship and trust as key elements for success and teamwork in land operations (Values and Standards of the British Army, 2000), and the AT week is designed to support these concepts by being both arduous and challenging for recruits. Recruits in Phase One training should experience many situations and scenarios where core values can be exhibited within an environment for

development, and the AT instructor's primary aim is therefore to use the AT activities as a medium by which the core values can be explored. The Infantry Training Centre, Catterick (ITC(C)) and the Army Foundation College, Harrogate (AFC (H)) were both used as Phase One training venues in this study. The ITC(C) trains infantry recruits and the AFC(H) trains a mixture of infantry and other combat arms.

Examples of training scenarios used include activities that as examples, explore the benefits of courage whilst moving into water hazards within a cave; the impact of loyalty and trust within the team whilst completing tasks related to safe practices; and working together to attain a common goal, such as rescuing a casualty. The current study collected two different types of data (motivation internalisation self-report for recruits and recruit perceptions of the transformational leadership exhibited by their AT instructor). Recruit motivational regulations were obtained pre-test and post-test, and the instructor leadership measure was administered mid-way through the 5-day AT period at the two independent Army training establishments to allow time for recruits to gain an awareness of their AT instructors' leadership style.

Participants

302 (M = 18.2 years, SD = 3.0 years) male, UK-based, Army recruits part way through their initial Army training, and 59 (42 military and 17 civilian) AT instructors took part in this study. Participants consisted of 153 recruits (50.7%) from the AFC (H) and 149 (49.3%) recruits from the ITC(C). The instructor to student ratio was set at 1:6, though recruit illnesses, injuries etc, reduced group sizes to 1:4 or 1:5 for some groups – the mean average group size was 5.1, SD =0.7. Throughout the week, the same AT instructor worked predominantly with each group for the whole 5-day period. All recruits attended the AT week between weeks 8 – 10 of their Phase One training, which lasts a total of 14 weeks.

Procedure and Design

All data was collected by one key researcher with the assistance of appropriate individuals at each data collection. This study was a longitudinal study designed to both assess the extent to which the core values are internalised and the impact that leader behaviours have on the internalisation of core values. As the study took place within two independent Army establishments there was a need to meet both military and organisational protocols. This was important to establish that a single method of research could be conducted with minimal variations. The two organisations trained in two separate parts of the country (Yorkshire Dales and South Wales), but the specific training aspects were fundamentally the same. Full approval for the research was requested from each unit's Commanding Officer (CO) prior to the start of the study. Each CO was consulted in person after a formal letter of application had been received and the benefits of the proposed research were discussed and reviewed with the researcher. Authority was given from each CO for the study to be conducted over the 6-week period from 15 February 2009 to 30 March 2009. This data collection period was chosen as the AFC(H) only recruit twice a year and the data capture had to be based around their specific training time frames. Ethical approval was obtained through the School of Sport, Health and Exercise Science's Ethics Committee at Bangor University.

A month prior to the study the researcher was given notification of dates/times for data capture with each Platoon/Troop by the units' training coordinators. Apart from the COs and the participants themselves, only the manager of AT in each of the two Army establishments knew of the proposed study, though only brief details were passed on. Recruits were asked to be seated at specific dates/times in line with the research requirements, and as the researcher needed to administer each questionnaire without outside pressures related to Army work, no time constraints were imposed. Three questionnaires were issued to recruits during each AT week. These consisted of a pre-test and post-test self-report motivational questionnaire administered at the start and end of AT, and a transformational leadership questionnaire which recruits completed with regard to their AT instructor on Day 3 of the AT

week. Timings for administering each questionnaire were the same throughout the 6-week period and classroom conditions were constant as the same venues were block booked throughout. Recruits were led into a pre-planned classroom setting at each designated time by their Section Corporal. To ensure both confidentiality and improve study confidence, the Section Corporals were only used to escort recruits to where they completed questionnaires and were not present during data collection. Recruits were briefed about the purpose and importance of the study with a pre-constructed brief that detailed the value of their contribution. They were offered an opportunity to ask questions and told that although there was a need for Service Numbers to be clearly written on each questionnaire, it would be impossible for anyone other than the researcher to identify any individual recruit within the study. All recruits were told that they could withdraw at any time and were explicitly informed of the voluntary nature of the research. The researcher, who was an Army officer, wore civilian clothes to avoid any military pressures being experienced and informed consent forms were completed at the start of each week's data capture which specified the details of the work and agreed practices. Recruits were then introduced to each questionnaire in due course and given ample time to complete them. Any recruits without a pen were given one by the researcher to ensure all questionnaires were completed at the same time. Recruits were told to put their pens down when they had completed a questionnaire and remain silent so that the researcher could see who was left to finish. The questionnaire completion was organised in this way to ensure all recruits completed their individual paper without feeling hurried at any time. All questionnaire data was collated and sealed in an envelope for further analysis by the researcher and recruits were again explicitly informed that only the researcher would be able to view the questionnaires. All recruits were then thanked for their contribution and a member of the Platoon/Troop staff was invited back in to escort the recruits back to their training. This process was the same for each of the three data collections in each training week. Data analysis did not start until all data for the whole six week period had been collected.

The pre-test self-report motivational questionnaire was given on the Monday morning, immediately after the opening AT brief; the mid-week transformational leadership questionnaire, which recruits completed about their AT instructor, was given in the evening of each Wednesday; and the post-test self-reporting motivational questionnaire was given at the end of training before the AT week's review. The pre and post-test motivational questionnaires contained 54 items that measured the regulation of all six Army core values at external, introjected and integrated levels. All items were written in a way that allowed for recruits to fully understand each one, as it was important that recruits didn't experience any confusion or ambiguity with any of the items and then require individual help during the process. The pre-test motivation questionnaire was completed by recruits in order to control the differences that may exist pre-test and ensure that any post-test differences were as a consequence of the AT week only.

Measures

Motivation Measure. The self-report Motivation Measure was a 54-item questionnaire, slightly adapted from the measure used by Arthur, Hardy & Wagstaff (2010), which has demonstrated psychometric validity. This measure was developed within the same field of British Army recruit training, and measured the six British Army's core values at external, Introjected and integrated levels. The integrated measure was a motivational composite of identified and integrated motivational regulations similar to that used in the study conducted by Vallerand, Fortier, & Guay, (1997). This was because, as has been previously stated, it is very difficult, practically, to differentiate between identified and integrated regulation.

Recruits answered each statement about their perceived individual level of regulation of core values using a 7-point Likert-type scale ranging from 1 = *not at all true*, through 3 = *somewhat true*, to 5 = *very true*. There were three items for each sub scale. External regulation items included statements such as: "*I must show selfless commitment because I want others to see that I am doing my duty*", and, "*I must act with integrity so that people will*

think I am a trustworthy person". Introjected regulation items included statements such as: "*It is mainly the threat of punishment that keeps me well disciplined*", and, "*I try to show respect for others because it's what I ought to do*". Integrated regulation items included statements such as: "*I see being loyal as an important part of who I am*", and, "*I try to be courageous because having the courage to do the right thing is what distinguishes a good soldier from a poor one*". The motivational measure used by Arthur et al. (2010) was adapted specifically for recruits undertaking AT within Phase One training. Scores for All core values together were obtained by adding up the answers to all the items for each value. Scores for each individual core value were also obtained in order to be able to assess both the overall internalisation individual value internalisation effects.

Leadership Measure. Instructor leadership behaviours were assessed on Day 3 of the adventurous training week using an adapted measure of leadership from Hardy et al. (2010). This is a 26-item scale, which assesses six transformational leadership behaviours and one transactional leadership behaviour. Recruits answered each statement about their perception of their instructor's leadership behaviours used during the AT activities. A 5-point Likert scale was used ranging from 1 = *not at all*, through 3 = *sometimes*, to 5 = *all of the time*, and all statements started with the pre-cursor "*My adventurous training instructor...* ". Items for each transformational leadership behaviour included statements such as: "talked enthusiastically about what needs to be accomplished in training" (*Inspirational Motivation*); "led by example" (*Appropriate Role Model*); "believes that each of us is crucial to the success of the section" (*Fosters Acceptance of Group Goals and Teamwork*); "has given me special recognition when I do very good work" (*Individual Consideration*); "insists on only the best performance" (*High Performance Expectations*); "asked questions that made me think" (*Intellectual Stimulation*). Items for the transactional leadership behaviour *Contingent Reward* included statements such as: "gave me praise when I did good work". The transactional leadership behaviour (contingent reward) occurs when the leader sets expectations, or goals, and then rewards or disciplines followers depending on the adequacy

of their performance. This leadership behaviour represents a key element of military training and has been proven to enhance performance in military training settings (Hardy et al., 2010).

Results

Hypothesis 1

Two main hypotheses were tested. The first hypothesis was that the adventurous training week in Phase 1 training would impact the internalisation of Army core values in Army recruits. The second hypothesis was that this internalisation would be positively affected by instructors exhibiting greater transformational leadership behaviours. The first hypothesis was tested using Bonferroni corrected, paired sample t-tests of internalisation changes from the start of the AT week – Time 1 (T1), to the end of the AT week – Time 2 (T2). Table 1 presents means and standard deviations for T1 and T2 measures, along with the t-values for T1 to T2 differences. The t-test of the Relative Autonomy Index RAI for All Values was significant ($t(293) = 3.86, p < .008$). This was the primary dependent variable of interest. The relative autonomy index (RAI) (Ryan & Connell, 1989) is a single score derived from the motivational regulation subscales that gives an index of the *degree* to which respondents feel self-determined. The index is obtained by applying a weighting to each subscale and then summing these weighted scores. In other words, each subscale score is multiplied by its weighting and then these weighted scores are summed. As a point of note, the RAI score only makes sense if the subscales do reflect a continuum of ordered variations in self-determination.

Additionally, four out of the six individual Army core values revealed significant RAI increases: Selfless Commitment ($t(298) = 3.49, p < .008$); Courage ($t(299) = 4.68, p < .008$); Loyalty ($t(294) = 3.41, p < .008$); and Respect for Others ($t(298) = 3.03, p < .008$). Despite the obvious limitation of a “one shot” quasi-experimental research design (Campbell

& Stanley, 1966), these results are at least consistent with the first hypothesis that the adventurous training week, used in the context of 'soldier development' plays an important part in recruits' internalisation of the core values.

<i>Means and Standard Deviations (SD)</i>				
Values	Time 1 Mean (SD)	Time 2 Mean (SD)	df	t
<i>All values</i>	17.20 (2.39)	17.78 (2.63)	293	3.86*
<i>Selfless Commitment</i>	17.07 (2.89)	17.63 (2.64)	298	3.49*
<i>Courage</i>	17.19 (2.46)	17.78 (2.46)	299	4.68*
<i>Loyalty</i>	17.45 (3.00)	17.97 (2.42)	294	3.41*
<i>Respect for Others</i>	16.92 (3.03)	17.40 (2.57)	298	3.03*
<i>Discipline</i>	17.22 (2.27)	18.01 (8.99)	299	1.51
<i>Integrity</i>	17.47 (2.97)	17.76 (2.56)	299	1.84
* $p < .008$ (Note – Bonferroni correction applied to Alpha level)				

The internalisation of core values was further explored by examining T1 to T2 differences in external, introjected, and integrated regulations, separately, for All core values and each core value. This was done using individual t-tests without the application of Bonferroni corrections. The justification for not using Bonferroni corrections was that the effects have already been shown to be significant in the RAI analyses. The present analyses are only for the purposes of elaboration and clarification and, as such, a Bonferroni correction would have been overly and unnecessarily conservative. The significant results for the three regulations are shown in Table 2. All core values were significant with introjected regulation, and four out of six core values for both external and integrated regulations. Selfless Commitment, Courage and Respect for Others were significant with all regulations.

TABLE 2
Pair Sampled T-Test results for the different motivational regulations

	External		Introjected		Integrated	
	<i>t</i> (<i>df</i>)	Sig (1-tailed)	<i>t</i> (<i>df</i>)	Sig (1-tailed)	<i>t</i> (<i>df</i>)	Sig (1-tailed)
All Values	-2.41 (293)	.01	-4.91 (298)	.00	-2.18 (298)	.02
Selfless Commitment	-1.70 (299)	.04	-3.35 (299)	.00	-2.22 (298)	.01
Courage	-3.09 (299)	.00	-5.05 (299)	.00	-1.88 (299)	.03
Loyalty	-4.07 (294)	.00	-4.93 (298)	.00		
Respect for Others	-1.65 (299)	.05	-3.24 (298)	.00	-2.15 (299)	.02
Discipline			-4.33 (299)	.00		
Integrity			-1.75 (299)	.04	-2.00 (299)	.02

Hypothesis 2

The second hypothesis examined whether the transformational leadership behaviours exhibited by adventurous training instructors had an effect on the internalisation of recruit core values during the adventurous training week. Specifically, four transformational leadership behaviours were hypothesised to have an effect on the internalisation of recruit core values during the AT week; namely, *Individual Consideration, Intellectual Stimulation, Fostering Acceptance of Group Goals and Teamwork, and Contingent Reward*. In exploring the data with regard to the second hypothesis, zero order correlations, partial correlations, hierarchical regression analysis and beta coefficients, as well as stepwise regression analysis were all utilised. The zero order correlations are shown in Table 3. They revealed significant correlations between almost all leadership behaviours and RAI for All core values and each independent core value. The notable outlier was the RAI for Discipline which showed generally weaker correlations with the leadership behaviours, especially Fostering Acceptance for Group Goals and Teamwork, which was not significant⁶.

⁶ Three other transformational leadership behaviours were also not significant (Inspirational Motivation, Appropriate Role Modelling, and High Performance Expectations), however they did not form a direct part of this study.

TABLE 3**Means, Standard Deviations, Zero Order Correlations between Study Variables. Alpha Coefficients are Displayed in Bold**

Scale	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1 RAI Selfless Commitment	17.63	2.64	B												
2 RAI Courage	17.78	2.46	.79**	B											
3 RAI Discipline	18.01	8.99	.11	.17**	B										
4 RAI Integrity	17.75	2.56	.79**	.83**	.17**	B									
5 RAI Loyalty	17.98	2.40	.79**	.85**	.19**	.85**	B								
6 RAI Respect for Others	17.40	2.57	.81**	.79**	.11	.81**	.84**	B							
7 Inspirational Motivation	3.76	.71	.29**	.30**	.06	.28**	.28**	.29**	B						
8 Appropriate Role Model	4.13	.69	.26**	.25**	.03	.25**	.27**	.21**	.53**	B					
9 Fostering Acceptance of Group Goals	4.32	.57	.28**	.27**	.05	.28**	.29**	.29**	.55**	.57**	B				
10 Individual Consideration	4.09	.69	.32**	.33**	.13*	.32**	.32**	.30**	.56**	.55**	.61**	B			
11 High Performance Expectations	4.08	.88	.21**	.24**	.06	.19**	.22**	.23**	.52**	.41**	.39**	.43**	B		
12 Intellectual Stimulation	3.92	.66	.31**	.30**	.13*	.25**	.28**	.29**	.57**	.51**	.55**	.56**	.34**	B	
13 Contingent Reward	3.88	.84	.31**	.32**	.13*	.31**	.31**	.32**	.60**	.62**	.54**	.60**	.42**	.60**	B

$N = 293-299$, ** $P < .001$ * $P < .05$.

Non-significant results are shaded.

Partial RAI correlations were conducted on All core values at Time 2 and each of the four hypothesised transformational leadership behaviours with RAI for All core values at Time 1 as the control variable. These were all significant and are shown in Table 4.

TABLE 4
Partial correlations of All values and four transformational leadership behaviours with T1 as the control variable

		All Values T2	Individual Consideration	Intellectual Stimulation	Fostering Acceptance of Group Goals	Contingent Reward
All Values T2	Correlation Sig (2-tailed) (df)	1.00 .00 0	.27 .00 (289)	.24 .00 (289)	.19 .00 (289)	.24 .00 (289)
Individual Consideration	Correlation Sig (2-tailed) (df)		1.00 .00 0	.54 .00 (289)	.59 .00 (289)	.58 .00 (289)
Intellectual Stimulation	Correlation Sig (2-tailed) (df)			1.00 .00 0	.53 .00 (289)	.57 .00 (289)
Fostering Acceptance of Group Goals	Correlation Sig (2-tailed) (df)				1.00 .00 0	.52 .00 (289)
Contingent Reward	Correlation Sig (2-tailed) (df)					1.00 .00 0

Regression Analyses on All Core Values

Regression analysis was also conducted on the RAI for All core values and the hypothesised transformational leadership behaviours with RAI for All core values at Time 1 again controlled. In block 1, RAI for All core values at Time 1 significantly predicted variance in RAI for All core values at Time 2 ($R^2 = .24$, $F_{1, 290} = 90.69$, $p < .01$). In block 2, the four hypothesised leadership behaviours significantly predicted Time 2 RAI for All core values over and above the variance accounted for by Time 1 RAI ($\Delta R^2 = .07$, $F_{4, 283} = 4.22$, $p < .01$). Details of independent contributions of the different leadership behaviours to the internalisation of core values were obtained by examination of the beta coefficients. This revealed Individual Consideration ($B = 2.21$, $p = .03$) to be significant and Intellectual Stimulation ($B = 1.55$, $p = .12$) and Contingent Reward ($B = 1.45$, $p = .15$) to be approaching significance. Even though a cautionary note needs to be applied to transformational

leadership behaviours approaching significance, their contributory value was felt to support the significant partial correlation results and to warrant further exploration. Beta coefficient results for all four hypothesised transformational leadership behaviours are detailed in Table 5.

Finally, to further explore the contribution of the different transformational leadership behaviours to the internalisation of All Core Values, a stepwise regression analysis was also performed using all seven transformational leadership behaviours. In this stepwise regression analysis, Time 1 RAI for All Values was again entered in the first block. In block 2, only Individual Consideration significantly predicted Time 2 RAI All Values over and above the variance accounted for by Time 1 RAI All Values ($\Delta R^2 = .05$, $F_{4, 289} = 22.19$, $p = .00$). The stepwise regression analyses for All values and each independent core value are summarised in Table 12.

	<i>Beta</i>	<i>t</i>	Sig.
(Constant)		4.18	.00
T1 RAI All Values	.42	8.11	.00
Individual Consideration	.16	2.21	.03
Intellectual Stimulation	.11	1.55	.12
Fostering Acceptance of Group Goals	.02	0.25	.80
Contingent Reward	.11	1.45	.15

Regression Analyses on Selfless Commitment

In block 1 of the forced entry regression analysis, RAI for Selfless Commitment at Time 1 significantly predicted variance in RAI Selfless Commitment at Time 2 ($R^2 = .26$, $F_{1, 295} = 104.18$, $p < .01$). In block 2, the leadership behaviours significantly predicted Time 2 RAI Selfless Commitment over and above the variance accounted for by Time 1 ($\Delta R^2 = .07$, $F_{4, 291} = 7.19$, $p < .01$). Although no individual beta coefficient was significant, Individual Consideration ($B = 1.88$, $p = .06$) and Intellectual Stimulation ($B = 1.64$, $p = .10$) both

approached significance. Beta coefficient results for Selfless Commitment are detailed in Table 6.

	<i>Beta</i>	<i>t</i>	Sig.
(Constant)		4.88	.00
T1 RAI All Values	.45	9.07	.00
Individual Consideration	.13	1.88	.06
Intellectual Stimulation	.11	1.64	.10
Fostering Acceptance of Group Goals	.03	0.50	.62
Contingent Reward	.05	0.74	.46

A stepwise regression analysis was again also performed. In this stepwise regression analysis, Time 1 RAI for Selfless Commitment was again entered in the first block. In block 2, Individual Consideration significantly predicted Time 2 RAI Selfless Commitment over and above the variance accounted for by Time 1 RAI Selfless Commitment ($\Delta R^2 = .05$, $F_{1, 294} = 22.33$, $p = .00$). In block 3, Intellectual Stimulation significantly predicted Time 2 RAI Selfless Commitment over and above the variance accounted for by Time 1 RAI Selfless Commitment and Individual Consideration ($\Delta R^2 = .01$, $F_{1, 293} = 5.26$, $p = .02$).

Regression Analyses on Courage

In block 1 of the forced entry regression analysis, RAI Courage at Time 1 significantly predicted variance in RAI Courage at Time 2 ($R^2 = .37$, $F_{1, 296} = 174.62$, $p < .01$). In block 2, the transformational leadership behaviours significantly predicted Time 2 RAI Courage over and above the variance accounted for by Time 1 ($\Delta R^2 = .05$, $F_{4, 292} = 6.33$, $p < .01$). Beta coefficient results identified that Individual Consideration was significant ($B = 2.22$, $p = .03$) and Intellectual Stimulation approached significance ($B = 1.84$, $p = .07$). Beta coefficient results for Courage are detailed in Table 7.

	<i>Beta</i>	<i>t</i>	Sig.
(Constant)		4.18	.00
T1 RAI All Values	.56	11.93	.00
Individual Consideration	.14	2.22	.03
Intellectual Stimulation	.11	1.84	.07
Fostering Acceptance of Group Goals	.04	0.01	.81
Contingent Reward	-.00	-0.01	.99

In the stepwise regression analysis, Time 1 RAI Courage significantly predicted variance in RAI Courage at Time 2 ($R^2 = .37$, $F_{1, 296} = 174.62$ $p < .01$). In block 2, Individual Consideration significantly predicted Time 2 RAI Courage over and above the variance accounted for by Time 1 RAI Courage ($\Delta R^2 = .04$, $F_{1, 295} = 20.70$, $p = .00$). In block 3, Intellectual Stimulation significantly predicted Time 2 RAI Courage over and above the variance accounted for by Time 1 RAI Courage and Individual Consideration ($\Delta R^2 = .01$, $F_{1, 294} = 4.52$, $p = .03$).

Regression Analyses on Loyalty

In block 1 of the forced entry regression analysis, RAI Loyalty at Time 1 significantly predicted variance in RAI Loyalty at Time 2 ($R^2 = .30$, $F_{1, 291} = 126.34$ $p < .01$). In block 2, the leadership behaviours significantly predicted Time 2 RAI Loyalty over and above the variance accounted for by Time 1 RAI Loyalty ($\Delta R^2 = .06$, $F_{4, 287} = 6.45$, $p < .01$). Beta coefficient results identified that only Individual Consideration even vaguely approached significance ($B = 1.44$, $p = .15$). Beta coefficient results for Loyalty are detailed in Table 8.

	<i>Beta</i>	<i>t</i>	Sig.
(Constant)		6.47	.00
T1 RAI All Values	.49	10.14	.00
Individual Consideration	.10	1.44	.15
Intellectual Stimulation	.05	0.85	.40
Fostering Acceptance of Group Goals	.07	1.11	.27
Contingent Reward	.08	1.17	.24

In the stepwise regression analysis block 2, Individual Consideration significantly predicted Time 2 RAI Loyalty over and above the variance accounted for by Time 1 RAI Loyalty ($\Delta R^2 = .04$, $F_{1, 290} = 19.18$, $p = .00$). No other leadership behaviours added to this prediction.

Regression Analyses on Respect for Others

In block 1 of the forced entry regression analysis, RAI Respect for Others at Time 1 significantly predicted variance in RAI Respect for Others at Time 2 ($R^2 = .27$, $F_{1, 295} = 110.55$, $p < .01$). In block 2, the leadership behaviours significantly predicted Time 2 RAI Respect for Others over and above the variance accounted for by Time 1 RAI Respect for Others ($\Delta R^2 = .07$, $F_{4, 291} = 7.09$, $p < .01$). Beta coefficient results identified that Fostering the Acceptance of Group Goals and Teamwork was the only leadership behaviour that even approached significance ($B = 1.43$, $p = .15$). Beta coefficient results for Respect for Others are detailed in Table 9.

TABLE 9			
Beta coefficients for Respect for Others with T1 as the independent variable			
	<i>Beta</i>	<i>t</i>	Sig.
(Constant)		5.19	.00
T1 RAI All Values	.47	9.48	.00
Individual Consideration	.09	1.28	.20
Intellectual Stimulation	.05	0.83	.41
Fostering Acceptance of Group Goals	.09	1.43	.15
Contingent Reward	.08	1.25	.21

In stepwise regression analysis block 2, Individual Consideration significantly predicted Time 2 RAI Respect for Others over and above the variance accounted for by Time 1 RAI Respect for Others ($\Delta R^2 = .05$, $F_{1, 294} = 19.90$, $p = .00$). In block 3, Fostering the Acceptance of Group Goals and Teamwork significantly predicted Time 2 RAI Respect for Others over and above the variance accounted for by Time 1 RAI Respect for Others ($\Delta R^2 = .011$, $F_{1, 293} = 4.83$, $p = .03$).

Regression Analyses on Discipline

In block 1 of the forced entry regression analysis, RAI Discipline at Time 1 did not predict any significant variance in RAI Discipline at Time 2 ($R^2 = .01$, $F_{1, 296} = 3.00$, $p = .09$). In block 2, the leadership behaviours also failed to predict Time 2 RAI Discipline over and above the variance accounted for by Time 1 ($\Delta R^2 = .02$, $F_{4, 292} = 1.77$, $p = .14$). Beta coefficient results for Discipline are detailed in Table 10.

	<i>Beta</i>	<i>t</i>	Sig.
(Constant)		1.47	.14
T1 RAI All Values	.07	1.13	.26
Individual Consideration	.09	1.08	.28
Intellectual Stimulation	.08	1.05	.30
Fostering Acceptance of Group Goals	-.09	-1.21	.23
Contingent Reward	.07	0.85	.40

In the stepwise regression analysis block 2, Intellectual Stimulation significantly predicted Time 2 RAI Discipline over and above the variance accounted for by Time 1 ($\Delta R^2 = .01$, $F_{1, 295} = 4.08$, $p = .04$). However, as previously mentioned, Time 1 RAI for Discipline was not significant at block 1 ($\Delta R^2 = .01$, $F_{1, 296} = 3.00$, $p = .09$).

Regression Analyses on Integrity

In block 1 of the forced entry regression analyse, RAI Integrity at Time 1 significantly predicted variance in RAI Integrity at Time 2 ($R^2 = .28$, $F_{1, 295} = 115.52$, $p < .01$). In block 2, the leadership behaviours significantly predicted Time 2 RAI Integrity over and above the variance accounted for by Time 1 RAI Integrity ($\Delta R^2 = .06$, $F_{4, 291} = 6.25$, $p < .01$). Beta coefficient results identified that Individual Consideration was significant ($B = 1.98$, $p = .05$). Beta coefficient results for Integrity are detailed in Table 11.

TABLE 11
Beta coefficients for Integrity with T1 as the independent variable

	<i>Beta</i>	<i>t</i>	Sig.
(Constant)		5.54	.00
T1 RAI All Values	.47	9.62	.00
Individual Consideration	.13	1.98	.05
Intellectual Stimulation	-.01	-0.13	.90
Fostering Acceptance of Group Goals	.08	1.17	.25
Contingent Reward	.08	1.27	.21

In the stepwise regression analysis block 2, Individual Consideration significantly predicted Time 2 RAI Integrity over and above the variance accounted for by Time 1 ($\Delta R^2 = .05$, $F_{1, 294} = 20.71$, $p = .00$).

The Stepwise regression analyses results for All core values and each independent core value separately are summarised in Table 12 below.

TABLE 12
Summary of Stepwise regression results for Individual Core Values

	Individual Consideration			Intellectual Stimulation			Fostering the Acceptance of Group Goals		
	ΔR^2	(df)	Sig.	ΔR^2	(df)	Sig.	ΔR^2	(df)	Sig.
All Core Values	.054	(289)	.00						
Selfless Commitment	.052	(294)	.00	.012	(293)	.02			
Courage	.041	(295)	.00	.009	(294)	.03			
Loyalty	.043	(290)	.00						
Respect for Others	.046	(294)	.00				.011	(293)	.03
Discipline*				.013	(295)	.04			
Integrity	.047	(294)	.00						

Note

* ΔR^2 for Time 1 RAI Discipline was not significant ($\Delta R^2 = .01$, $F_{1, 296} = 3.00$, $p = .09$).

Discussion

Results Overview

In line with Hypothesis 1, the results are consistent with the notion that adventurous training supports the internalisation of core values in British Army recruits. Of the six Army core values, the internalisation of Selfless Commitment, Courage, Loyalty, and Respect for Others, were all significantly enhanced. However, Integrity and Discipline appear to have been much less affected and did not reveal significant RAI increases, although it is noteworthy that integrated and introjected regulations of Integrity and introjected regulation of Discipline were significantly enhanced. Partial correlation analysis demonstrated that all transformational leadership behaviours were related to the internalisation of core values. Furthermore, regression analyses provided interesting results regarding the four transformational leadership behaviours specified in Hypothesis 2, namely, Individual Consideration, Intellectual Stimulation, Fostering the Acceptance of Group Goals and Contingent Reward. Even though beta coefficients identified that only Individual Consideration made a consistent and unique contribution to the internalisation of core values, it would be wrong to consider this behaviour as the only transformational leadership behaviour to be important to this internalisation process during the adventurous training week for recruits. Other behaviours (Intellectual Stimulation, and to a lesser degree Fostering the Acceptance of Group Goals) had beta coefficients that approached significance and contributed unique variance in the Stepwise analyses. Furthermore, all leadership behaviours had significant partial correlation coefficients with the internalisation of core values.

The Internalisation of Core Values and Adventurous Training

The core values were introduced in 2000 as a formal expression of the qualities that officers and soldiers of the British Army were expected to demonstrate; an expectation of behaviour. They were not new, but until this time they were implicitly assumed, rather than explicitly stated. That said, academic scrutiny across the variety of activities conducted within Phase One training has to date not been conducted. Using Self-determination Theory (Deci & Ryan, 1985; Ryan & Deci, 2000b), the present study assessed the extent to which the core values were internalised during the AT week in Phase One training. Both significant and approaching significant results provided interest. The internalisation of core values at Time 1 had a significant impact on the internalisation at Time 2 for five of the six independent core values; however, discipline appeared to have been unaffected by Time 1 internalisation. In addition, the exploration of T1 to T2 differences in all three regulations (external, introjected, and integrated) also provided significant results for All core values, Selfless Commitment, Courage, and Respect for Others. These results demonstrate a fairly robust all-round internalisation effect, however, the findings for the core value of Discipline are interesting for a number of reasons: 1) the Adventurous Training week appears to have had a reasonably robust effect upon introjected regulation, rather than external or integrated regulation for all core values, including discipline; 2) internalisation of discipline at Time 1 had no significant impact on internalisation at Time 2, thus, whatever changes in the internalisation of this value took place as a result of AT, they were independent of changes that took place due to the more general training that preceded the AT Week; 3) Intellectual Stimulation seems to be the most influential transformational leadership behaviour with regard to bringing about changes in the internalisation of Discipline. Potential reasons for these observations can only be speculative and as Hardy et al. (2010) suggested, a longer-term study may be beneficial. 4) In addition, Discipline as a core value, is probably not a primary focus of AT and recruits may not directly see the same relevance of discipline as they do for other aspects of training, such as drill, shooting or combat skills. This is at least partially

supported by the fact that T1 RAI Discipline does not correlate significantly with T2 RAI Discipline.

The internalisation of values is complex. Valuing comes from internalisation and integration (Ryan & Stiller, 1991), and when the value of an activity is internalised, individuals do not necessarily become more interested in the activity or more intrinsically motivated to do it, but they do become more willing to do it because of its personal value (Deci et al., 1991). Deci et al. additionally stated that extrinsically motivated behaviour may have either an external or an internal locus of causality. However, this is complicated further by deCharms (1968); Lepper & Green (1978), and Vansteenkiste, Lens, & Deci (2006), who stated that extrinsically motivated behaviour is defined as “engaging in an activity to obtain an outcome that is separable from the activity itself”. Deci et al. (1999) and Deci & Ryan (2000) found intrinsic motivation to be undermined when an individual’s behaviour was controlled by specific external contingencies (external regulation) – so can both intrinsic motivation and extrinsic motivation be improved at the same time? This is especially interesting regarding the three core values that were significant at all three regulations (Selfless Commitment, Courage and Respect for Others). To complicate matters further, research has supported the idea that strong external regulation is less satisfying of the basic psychological needs than internal regulation (Vansteenkiste, Neyrinck, et al., 2007), and when people identify with the personal importance of the activity (i.e., identified regulation), they are more likely to engage in the activity with a sense of volition and willingness, which is in stark contrast to behaviours being externally regulated.

Introjected regulation appeared to be the most affected regulation within this study and with introjected regulations the contingent consequences are administered by the individual themselves such as Ego involvement (e.g., Ryan, 1982). Introjection represents a partial internalisation in which regulations are in the person but have not really become part of the integrated set of motivations, cognitions, and affects that constitute the self: The behaviour is not yet self-determined. This is particularly interesting as the regulation is within the

person, but still relatively external to the self. It is more likely that behaviour maintained by introjected regulation is maintained over time than behaviour maintained by external regulation, but it still remains a relatively unstable form of regulation (e.g., Koestner et al. 1996). Introjected regulation often involves internal prods and pressures and the AT environment together with the climate set by the AT instructor may have been key to this. There may have been many instances characterised by inner conflict between the demands of the introjected regulation and the person's lack of desire to carry it out. Pressures to complete tasks are common within AT and recruits are often put into situations where they, as individuals, have to make decisions and either take a lead role, or just be the first to do something! Introjection represents a prime instance of behaviour that is motivated by processes internal to the person but relatively external to the self, and as Higgins (1987) suggested "introjected values or standards can affect the self and motivate behaviour but is not the basis for self-determined action".

There is a human readiness to internalise ambient values and regulations, yet, to fully integrate such values and regulations, and thus become self-determined, recruits must grasp their importance and synthesise their meaning with respect to the other British Army core values and their individual motivational orientations as a consequence. Intentions that originate within the individual recruit will produce qualitatively better functioning than intentions that are coerced or manufactured by an external causality (e.g., deCharms, 1987). In addition to the significance of less internalised regulations both All values and four from six core values showed significant gains in integrated regulation. This may have been because the AT environment supports opportunities for recruits to experiment with ideas to solve problems and tasks, thus aiding the development of self-determination. Holding similarities to the study by Sheldon and Elliot (1998), recruits were probably more likely to actively integrate the values and regulations, and thus volitionally or authentically carry out the behaviours either as a consequence of the situation or AT instructors' leadership that promoted individuals' development. Similarly, Ryan & Connell (1989) found that introjected

regulation and identified regulation were both correlated with children's self-reports of trying hard in school and with parents' reports of their children being motivated for school work. However, introjection was also positively correlated with anxiety and maladaptive coping with failure, whereas identification was positively correlated with enjoyment and proactive coping with failures. Interestingly, the present study also found significance with both introjected and integrated regulations, but research into the associated problems and/or benefits was not assessed and therefore further investigation may be necessary to provide more clarity with regard to the specific benefits of this internalisation process. Less internalised recruits who felt controlled might well be likely to perform less well, but in the AT activities used in the present study there were not any performance indicators or tests that could have provided standards which could be measured against.

The Impact of Transformational Leadership on the Internalisation of Core Values

It seems fair to say that the transformational leadership exhibited by the AT instructor plays a key role in the internalisation of recruit core values. Adventurous training, by its very nature provides an ideal environment for this internalisation and setting the right climate for maximising the benefits to recruits is important. Four specific transformational leadership behaviours (Individual Consideration, intellectual Stimulation, Fostering the Acceptance of Group Goals, and Contingent Reward) were hypothesised to have an effect on the internalisation of recruit core values and results provide interesting discussion for each. Figure 1 provides an overview of the significant beta coefficients obtained in the regression analyses and shows the prominence of two behaviours; Individual Consideration and Intellectual Stimulation. In the partial correlation analyses, all four hypothesised behaviours significantly predicted significant RAI results in All core values, as well as all independent core values – except Discipline.

As indicated earlier, results regarding Discipline are surprising, though not without explanation. Success on a task may require good discipline and it is also thought to be

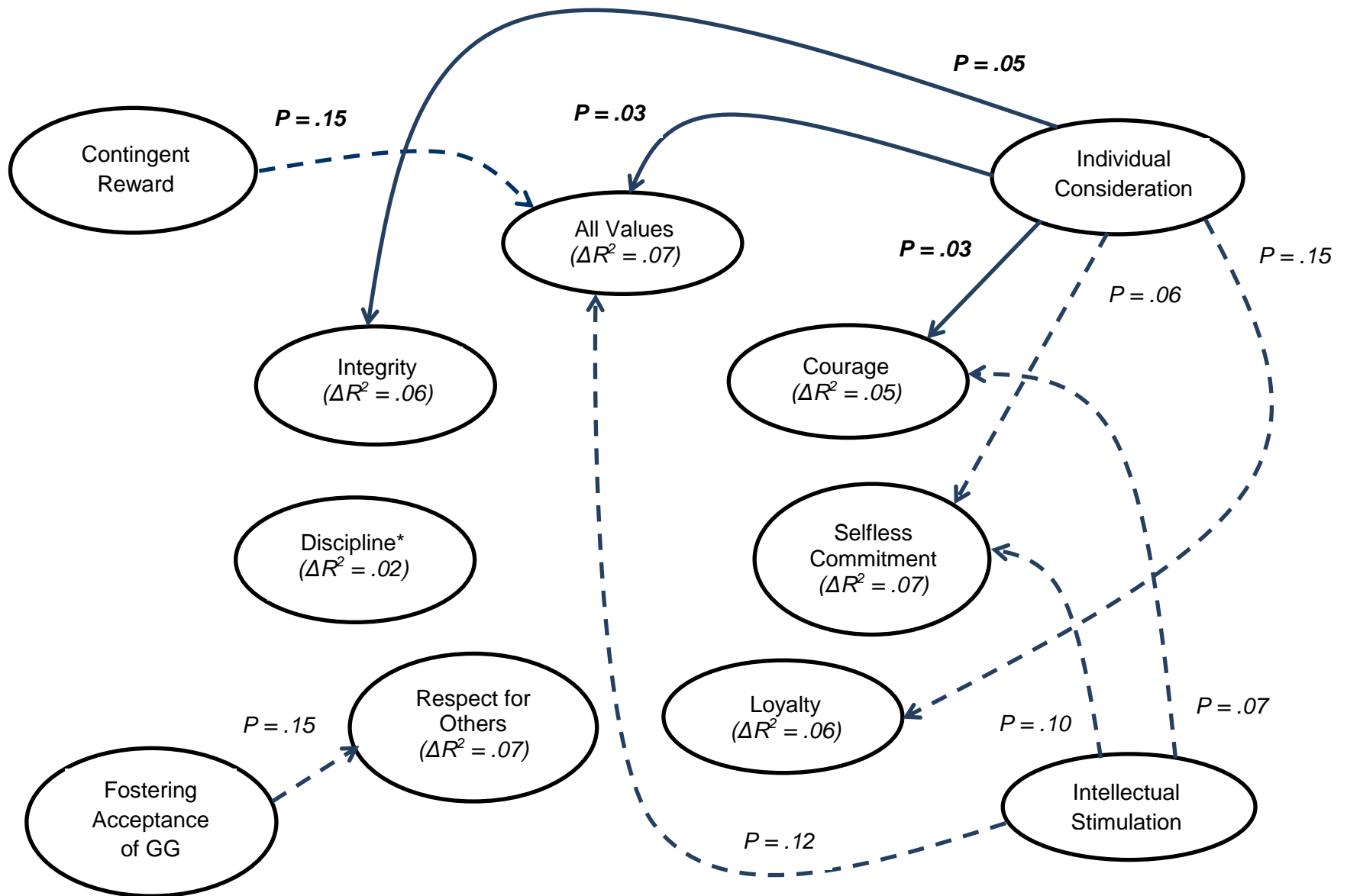


FIGURE 1

Significant Beta Coefficients obtained from the forced entry regression analyses are shown (based on four hypothesised leadership behaviours).

Variance accounted for is shown in parenthesis, solid lines indicate significant Beta Coefficient results ($p < .01$), dashed lines indicate Beta Coefficient results approaching significance ($p < .15$).

* Time 2 Discipline was not significant ($p = .14$).

helpful in conquering fear (Values & Standards of the British Army, Commanders' Edition, 2010). Discipline is fundamental to military life. However, as mentioned earlier the AT week stands separate to the main recruit training process for a variety of reasons: 1) Military uniform is not worn throughout the AT week and the uniform and ranks worn by senior personnel allow for clear lines to be recognisable – without this visual and definitive impact, recruits, who have only completed 6-7 weeks of training, *may* lower their guard to basic disciplinary requirements; 2) A large proportion of AT instructors are civilian and even though they have been trained in delivering AT activities that focus on the development of core values, they do not necessarily personally hold the same important values.

Of all the Army core values, Discipline is probably the clearest one that is perceived as the difference between those who follow a uniformed service and those that do not; 3) The AT activities are designed to challenge recruits in making decision, solving problems, and achieving objectives on individual and team-based tasks, and therefore being more self-determined in their actions. Of note, Zero Order correlations for Discipline were only significant for three of the four hypothesised transformational leadership behaviours and not significant for Fostering the Acceptance of Group Goals, as well as Inspirational Motivation, Appropriate Role Modelling and High Performance Expectations, supporting to some degree their exclusion from the present study's hypotheses.

Individual Consideration was the only core value to produce significant beta coefficient results, specifically for Courage, Integrity, and All values. It also had beta coefficients approaching significance for both Selfless Commitment and Loyalty. Arthur, Hardy & Wagstaff (2010) found similar results with Individual Consideration being the only behaviour to significantly enhance the internalisation of core values over the duration of recruit training. Interestingly, Callow et al. (2009) found that Individual Consideration predicted task cohesion in a high performance group of athletes, but not in a low performance group. These results were not viewed by Callow et al. as surprising given that previous research into athletes' social support produced similar results (e.g., Challadurai & Carron, 1983). Likewise, recruit

training is renowned to be very arduous and challenging (Dvir et al., 2002; Hardy et al., 2010), and AT emphasises the need for recruits to perform in challenging activities. Furthermore, AT in Phase One training is delivered with a smaller instructor to recruit ratios than other aspects of recruit training, which may also be beneficial for instructors in gaining an improved focus on individuals.

Stepwise regression analyses generally supported the findings obtained in the forced entry results and did not really identify any important “missing” leadership behaviours. The results for Integrity are interesting as this core value appears to have been affected less than Courage and Selfless Commitment, however, beta coefficient and stepwise results proved significant, and Integrity was also significant for T1 to T2 introjected and integrated regulations, but not external regulation. In speculation, the significance of these effects on Integrity may be linked to the concept of ‘trust among comrades’ during the AT activities. This may be due to the prominence of activities that require teamwork for their successful completion, such as when a recruit who is being belayed by another recruit wants particular reassurance that he is safe just before making a hard and perceived risky move; or a recruit that trusts another to ensure he safely gets through a duck or sump in a cave.

Intellectual Stimulation. The forced entry regression analyses may have identified Individual Consideration as the only significant transformational leadership behaviour, but there was also clear support from the stepwise regression analyses for the importance of Intellectual Stimulation. Intellectual Stimulation approached significance for All values, Courage, and Selfless Commitment and achieved significance for the stepwise regression analyses for the same three core values. The naturally challenging environment that many recruits find whilst undertaking new and adventurous activities was hypothesised to provide opportunities for this behaviour to have an impact on the internalisation of a number of core values and although Intellectual Stimulation *appeared* to directly contribute a level of independent importance, the effect of Individual Consideration had a far greater bearing; suggesting that there may be benefits in focusing on these two behaviours for this type of recruit training.

The AT week during Phase One training is designed to challenge 'each' recruit with both individual and group tasks and the concept of recruits being challenged 'intellectually as individuals', especially in a developing leadership role, may have value in further analysis. In their study on Royal Marine training, Hardy et al (2010) found that all leadership behaviours except Intellectual Stimulation and High Performance Expectations were important in discriminating between pass and failure during recruit training. However, Callow et al.'s (2009) results support the notion that the relative influence of different leadership behaviours might vary in different contexts, and in the present context Intellectual Stimulation may have provided a sounding board for Individual Consideration's prominence. A recruit might experience Courage by achieving a challenge for the first time, especially if the perceived risk is greater. Putting the needs of other members of the team ahead of your own interests and doing your best at all times for others are acts of Selfless Commitment and the instructor that increases the level of challenge during the AT activity appears to impact both core values.

Fostering the Acceptance of Group Goals was also predicted to be more significant when measured against independent core values than the beta coefficient results identified. Bass (1985) argued that transformational leadership energises groups to persist when conditions are unpredictable, difficult, and stressful, and the partial correlations for this behaviour were significant, which generally support its value within the AT environment. However, the only beta coefficient approaching significance was for Respect for Others, and this relationship was not overly strong ($p = .15$). The stepwise regression analysis however, provided support for the notion that *Fostering the Acceptance of Group Goals* might be important with regard to internalising Respect for Others. Speculation for this may be that the AT environment provides greater opportunities for teamwork within small groups and in so doing individual bonds within the team improve. Individuals may gain an improved understanding of other's goals and aspirations, and these goals and aspirations may be seen as also important to the individual. In contrast, other group members that experience fears and anxieties in given challenges may also be perceived in the same way, and whether success

or failure is experienced, relationships within the team and Respect for Others, in particular may be improved. This relationship appears unique within this study, which is surprising given the major focus on teamwork and group development within the military. Hardy et al. (2010) found within military Phase One training that this behaviour positively influenced performance, however, this study suggests that the benefits are as much for individuals as teams, and Individual Consideration's prominence may have overshadowed the influence of this (and other variables) on the development of core values. Implications for developing activities within AT to strengthen this connection may be of future value to both the AT week and Phase One training as a whole.

Out of the four hypothesised transformational leadership behaviours, *Contingent Reward* provided the least significant results. Although it was significant in both the zero order and partial correlation analyses, it made no unique contribution in any of the regression analyses. Transactional contingent reinforcement is often viewed as the core component of effective leadership behaviour in organisations (Bass et al. 2003), and transactional leadership is often believed to establish clear standards and expectations of performance within the military. Contingent Reward should also relate positively to performance, when applied appropriately, in that leaders who use Contingent Reward clarify expectations and recognise achievements that positively contribute to higher levels of effort and performance. Ryan (1982) reported that positive feedback could be experienced as either informational *or* controlling, depending on the experimenter's style of communication. Vansteenkiste & Deci (2003) suggested that rewards tend to only forestall self-regulation. However, Hardy et al. (2010) found that the perceived use of Contingent Reward discriminated between pass and fail in Army recruits. This renders the absence of any significant beta coefficients or significant stepwise regression contribution for Contingent Reward somewhat surprising. The following post hoc potential explanations may be relevant, although they remain entirely speculative: 1) AT instructors may have lacked understanding, ability, or experience in using this behaviour (this seems unlikely because AT instructors have generally received the same sort of training that the instructors used in Hardy et al.'s study had received); 2) contextual

differences between “regular” training and AT make Contingent Reward less relevant in the AT setting. For example, the primary limiting factors in “regular” training may be competence and the motivation to work hard, whilst the primary limiting factor in AT may be emotional regulation (control of fear). It seems at least plausible that Contingent Reward is less effective in helping recruits to control their fear than it is in helping them to feel competent or being able to “go the extra mile”.

The present study has demonstrated mixed effects regarding benefits to the internalisation of core values during the AT week in Phase One training. Predictably, the internalisation of Courage was stronger than the other core values, as the AT week provides many opportunities for individuals to experience ‘stretch’ in what for most recruits is a new and challenging environment. All other core values received significant results to a lesser degree, however, the internalisation of Discipline consistently proved the weakest. The AT week in Phase One training has been established to directly support the internalisation of all Army core values: indeed, the main AT Wing in Sennybridge, South Wales that delivers AT to recruits in Phase One training for the Initial Training Group is called the ‘Soldier Development Wing’ for this purpose. However, results from this study indicate that the Army’s perception of how core values are developed would benefit from a more critical approach in ‘matching’ the development of certain core values to the AT week and placing the primary focus for others in other aspects of training. The internalisation of Discipline stands out as an important training area that may not receive the training development it is presumed to have. Individual Consideration and Intellectual Stimulation proved to be important in the present study, and Fostering the Acceptance of Group Goals influenced the internalisation of Respect for Others. However, although Contingent Reward proved to be important to the longer-term output requirements specific to pass and fail results (Hardy et al., 2010; Hardy & Arthur, 2006), its contribution to the AT week is specifically in support of recruits internalising core values and does not therefore appear to have the same benefit.

Limitations of this Study and Future Directions

The current study clearly identified the benefit of AT within Phase One recruit training, as all core values were internalised to a greater or lesser degree through the AT week. Further analysis with the motivational regulations External, Introjected, and Integrated, strengthened results with all independent core values except Discipline showing significant increases in at least two out of three regulations. The impact of transformational leadership behaviours exhibited by AT instructors on the internalisation of core values, produced mixed results and the importance of all four hypothesised behaviours requires further enquiry. Individual Consideration had by far the 'loudest voice', however Intellectual Stimulation also appeared to make a contribution to the internalisation of core values, especially for Courage and Selfless Commitment, and even contributed significantly in the stepwise regression analysis for the core value Discipline.

The importance of Fostering the Acceptance of Group Goals and Teamwork should be reviewed further for improving its impact during the AT week, as teamwork remains a fundamental aspect of Army life and the concept of 'One Company' is reinforced in most Army organisations (e.g., AFC(H)). Hardy & Arthur (2006) found that different transformational leadership behaviours were more significant to different units within the British Army Infantry. They found in their study of Army recruits that leadership behaviours were differentially important across recruits from three different divisional companies of the British Army (Guards, Parachute, and Line Regiments), with Inspirational Motivation and Appropriate Role Modelling having the most prevalence. In addition, the study conducted by Hardy & Arthur (2006) used performance data and recruits working under controlled conditions. Both of these factors would have improved the strength of the findings in the current study and might have answered some of the key unanswered questions as to whether AT benefits different units in the British Army in different ways. The lack of a longer term retention measure is also an obvious limitation of the study.

Nevertheless, this study was the first to examine the place of AT within Army recruit training, and made observations across two major Phase One establishments. AT within Phase One remains an integral part of training and its connection to core values has grown in recent years. The Initial Training Group (ITG), responsible for the training of all Phase One recruits, less Standard Entry infantry, now uses the Soldier Development Wing to focus recruits on their core values development through the use of AT activities. Since 2006, there has been a greater desire to review the British Army Core Values and Standards ((HQ/AG/1/8/1, 2006), and as such, a new study based on the current operational environment is being conducted later in 2012 by HQ Initial Training Group (ITG)⁷ to improve the inculcation of British Army Values and Standards into recruit training. It is hoped that this study provides some support to this work and strengthens the need for core values to be viewed independently, and not always as a whole.

Leadership constitutes a complex interaction between leaders, followers, and the context in which they operate (Fiedler, 1996) and the AT environment provides the ideal opportunity for this interaction. Transformational leadership develops followers to believe in themselves and their mission. Furthermore, although as Colonel Banham (2009) stated “the core values are antiquated”, this study provided a clear linkage between the value of adventurous training in recruit training, the benefit of using this environment for supporting the internalisation of core values in modern training, and the need for good transformational leadership in supporting the development of future Army recruits.

⁷ HG ITG are responsible for all Phase One training less Standard Entry Infantry and TA.

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INFORMED CONSENT FORM

The researcher conducting this project subscribes to the ethics conduct of research and to the protection at all times of the interest and safety of participants. This form and the information sheet that has been given to you are for your protection and full understanding of the procedures. Your signature on this form will signify that you have received information which describes the procedures and benefits of this research project, that you have received adequate opportunity to consider the information, and that you voluntarily agree to participate in the project.

Having been asked by Capt Higgins working on behalf of the School of Sport Health and Exercise Sciences at the University of Wales, Bangor, to participate in a research project, I have received information regarding the procedures of the experiment.

I understand that I may withdraw my participation in this experiment at any time.

I also understand that I may register any complaint I might have about this experiment to the Head of the College of Health and Behavioural Sciences, and that I will be offered the opportunity of providing feedback on the experiment using standard report forms.

I confirm that I have been given adequate opportunity to ask any questions and that these have been answered to my satisfaction.

I have been informed that the research material will be held in confidence by both Capt Higgins and the civilian research team and that no other military personal will get to see any of the information that I provide.

I agree to participate in this study

Signature: _____

Date: _____

Name: _____

RECRUIT SELF-REPORT QUESTIONNAIRE 1

Your Personal Details

1. Age (at last birthday): _____ years	2. Service Number: _____
3. Week of Training: _____	4. Current Platoon: _____
5. Activity Group Number: _____	
6. Nationality: _____	7. Is English your first language: <input type="checkbox"/> Yes <input type="checkbox"/> No

Involvement in this study is voluntary and you are free to withdraw at any time. Please read the following information sheet before completing this questionnaire.

What is this questionnaire?

The questionnaire you are being asked to complete is designed to gain a better understanding of the factors influencing the performance of recruits. It asks you about your personal attitude towards training. This is **NOT a test**. There are no right or wrong answers. There are no good or bad answers. We want to know your personal views on the issues raised in the questionnaire.

You may feel that some of the questions are repeating themselves or may not apply to you, but please give your most truthful response to all questions as this will give us a fuller picture of what you experience in training.

Who will see my answers?

The information you give is totally confidential. Only researchers at the University of Wales, Bangor will have access to questionnaires completed by individuals. The report on the findings of this survey will be presented in such a way that it will not be possible for any one individual, Section or Platoon to be identified. All information you provide will be treated in accordance with the Data Protection Act 1998.

Once you have completed the questionnaire, please hand it to the administrator. Your Service Number and section are required purely for data analysis and does not reflect on you in any way.

How long will it take?

There is no set time limit but this questionnaire should take about 15 minutes to complete.

How do I fill in this questionnaire?

Please read each question carefully. For each question you are asked to circle one response which best fits your views. Work quickly, giving your most truthful reply. Respond according to your first reaction. Do not spend too long on one question. An example is shown below:

	Not at all true		Somewhat true			Very true	
I see being loyal as an important part of who I am	1	2	3	4	5	6	7

Core Values

There are a variety of reasons why people adhere to the Army's core values. Please indicate how true each of these reasons are for why you adhere to the core values.

		Not at all True		Somewhat True			Very True	
1.	I must show selfless commitment because I want others to see that I am doing my duty	1	2	3	4	5	6	7
2.	I must conform to the Army's disciplinary codes because I will be punished if I don't	1	2	3	4	5	6	7
3.	I have to be seen to show moral and physical courage to prove to others that I have the guts for the job	1	2	3	4	5	6	7
4.	Respect for others is an important quality that I have learned from the Army	1	2	3	4	5	6	7
5.	I see being loyal as an important part of who I am	1	2	3	4	5	6	7
6.	I must act with integrity so that people will think I am a trustworthy person	1	2	3	4	5	6	7
7.	I should show selfless commitment because otherwise I could not respect myself	1	2	3	4	5	6	7
8.	I adhere to the Army's disciplinary codes because they are an essential part of being a good soldier	1	2	3	4	5	6	7
9.	I try to act with integrity because it is a valuable personal characteristic to live up to	1	2	3	4	5	6	7
10.	I try to be courageous because having the courage to do the right thing is what distinguishes a good soldier from a poor one	1	2	3	4	5	6	7
11.	I must be seen to show selfless commitment so that others can see that I sacrifice my own interests for the good of the Army	1	2	3	4	5	6	7
12.	I try to show moral and physical courage because both are essential qualities of a good soldier	1	2	3	4	5	6	7

		Not at all True		Somewhat True			Very True	
13.	I make the effort to act with integrity because I would feel dishonourable if I didn't	1	2	3	4	5	6	7
14.	I should try to act with integrity because I'd feel guilty if I didn't	1	2	3	4	5	6	7
15.	Being loyal to your superiors and mates is very important to me	1	2	3	4	5	6	7
16.	I have to be seen to show respect for others because I don't want people to think I don't care about others' feelings	1	2	3	4	5	6	7
17.	I try to act with integrity because it is an admirable quality in a soldier	1	2	3	4	5	6	7
18.	I should show moral and physical courage at all times because I would be ashamed of myself if I didn't	1	2	3	4	5	6	7
19.	I try to show selfless commitment because I would feel dishonourable if I didn't	1	2	3	4	5	6	7
20.	It is mainly the threat of punishment that keeps me well disciplined	1	2	3	4	5	6	7
21.	I should stay well disciplined because I would be a poor soldier if I didn't	1	2	3	4	5	6	7
22.	I must be seen to show respect for others because I will get into trouble if I don't	1	2	3	4	5	6	7
23.	I feel proud of the Army's concern for respect for others	1	2	3	4	5	6	7
24.	I must be seen to act with integrity to prove to others that I am honourable	1	2	3	4	5	6	7
25.	Selfless commitment is the cornerstone of being a good soldier	1	2	3	4	5	6	7
26.	I must be seen to show moral and physical courage because people will think I'm a weak person if I don't	1	2	3	4	5	6	7

		Not at all True		Somewhat True			Very True	
27.	I try to stay well disciplined because getting a bad confidential report would make me feel bad about myself	1	2	3	4	5	6	7
28.	I should act with integrity because it would damage myself respect if I didn't	1	2	3	4	5	6	7
29.	I have to be seen to be loyal so that other people will think I am a good soldier	1	2	3	4	5	6	7
30.	If I did not show respect for others I would not be able to respect myself	1	2	3	4	5	6	7
31.	I must be seen to show selfless commitment because I don't want people to think that I'm only interested in looking after number one	1	2	3	4	5	6	7
32.	I should try to be courageous at all times because I would feel very bad about myself if I didn't	1	2	3	4	5	6	7
33.	I should try to remain disciplined because I would not respect myself if I didn't	1	2	3	4	5	6	7
34.	I must be seen to be loyal so that people will think I am dependable	1	2	3	4	5	6	7
35.	I try to show respect for others because it is important to me both as a person and as a soldier	1	2	3	4	5	6	7
36.	I ought to show selfless commitment because otherwise I would feel unworthy	1	2	3	4	5	6	7
37.	I must show moral and physical courage because I don't want people to think I'm a coward	1	2	3	4	5	6	7
38.	I have to be seen to be well disciplined to avoid punishment	1	2	3	4	5	6	7
39.	I try to act with integrity because it is an essential part of being a good soldier	1	2	3	4	5	6	7

		Not at all True		Somewhat True			Very True	
40.	I have to show loyalty to stop people thinking I am unreliable	1	2	3	4	5	6	7
41.	I try to show loyalty because I would not feel fit to be a soldier if I didn't	1	2	3	4	5	6	7
42.	I try to show respect for others because it's what I ought to do	1	2	3	4	5	6	7
43.	I believe that being well disciplined helps me to be a better soldier	1	2	3	4	5	6	7
44.	I try not to doubt my moral and physical courage because otherwise I would feel worthless	1	2	3	4	5	6	7
45.	The idea of selfless commitment inspires me to be a better soldier	1	2	3	4	5	6	7
46.	I have to show integrity so that people will see that I am responsible	1	2	3	4	5	6	7
47.	Being loyal is the right thing to do as a soldier	1	2	3	4	5	6	7
48.	It is important to me to be well disciplined because I am committed to the Army way of life	1	2	3	4	5	6	7
49.	Selfless commitment is an essential quality in a soldier	1	2	3	4	5	6	7
50.	I try to show both moral and physical courage because that is what defines the spirit of a good soldier	1	2	3	4	5	6	7
51.	I try to show loyalty because I would feel guilty if I didn't	1	2	3	4	5	6	7
52.	I try to show respect for others because I would feel unworthy of my cap badge if I didn't	1	2	3	4	5	6	7
53.	I must be seen to show respect for others because if I don't people will think I am a poor soldier	1	2	3	4	5	6	7
54.	I should show loyalty because otherwise I would feel like a failure	1	2	3	4	5	6	7

RECRUIT LEADERSHIP QUESTIONNAIRE 2

Your Personal Details

1. Age (at last birthday): _____ years	2. Service Number: _____
3. Week of Training: _____	4. Current Platoon: _____
5. Activity Group Number: _____	6. Are you an Infantry Recruit? Y N
7. Nationality: _____	8. Is English your first language: <input type="checkbox"/> Yes <input type="checkbox"/> No

Involvement in this study is voluntary and you are free to withdraw at any time. Please read the following information sheet before completing this questionnaire.

What is this questionnaire?

The questionnaire you are being asked to complete is designed to gain a better understanding of the factors influencing the performance of recruits. It asks you about your Adventurous Training Instructor this week. This is **NOT a test**. There are no right or wrong answers. There are no good or bad answers. We want to know your personal views on the issues raised in the questionnaire.

You may feel that some of the questions are repeating themselves or may not apply to you, but please give your most truthful response to all questions as this will give us a fuller picture of what you experience in training.

Who will see my answers?

The information you give is totally confidential. Only researchers at the University of Wales, Bangor will have access to questionnaires completed by individuals. The report on the findings of this survey will be presented in such a way that it will not be possible for any one individual, Section or Platoon to be identified. All information you provide will be treated in accordance with the Data Protection Act 1998.

Once you have completed the questionnaire, please hand it to the administrator. Your Service Number and section are required purely for data analysis and does not reflect on you in any way.

How long will it take?

There is no set time limit but this questionnaire should take about 15 minutes to complete.

How do I fill in this questionnaire?

Please read each question carefully. For each question you are asked to circle one response which best fits your views. Work quickly, giving your most truthful reply. Respond according to your first reaction. Do not spend too long on one question. An example is shown below:

My Adventurous Training Instructor:		Not at all	Once in a while	Some times	Fairly often	All of the time
1.	Insists on only the best performance.	1	2	3	4	5

Your Instructor

The following questions concern the way your Adventurous Training Instructor has typically behaved most of the time with you and the other recruits in your Group. Please circle your response.

My Adventurous Training Instructor:		Not at all	Once in a while	Some times	Fairly often	All of the time
1.	Insists on only the best performance.	1	2	3	4	5
2.	Gives me special recognition when I do very good work.	1	2	3	4	5
3.	Is a good role model for me to follow.	1	2	3	4	5
4.	Gets me to re-think the way I do things.	1	2	3	4	5
5.	Leads by example.	1	2	3	4	5
6.	Believes that each of us is crucial to the success of the team.	1	2	3	4	5
7.	Will not settle for second best.	1	2	3	4	5
8.	Talks optimistically about my future in the Army.	1	2	3	4	5
9.	Talks enthusiastically about the Army's core values.	1	2	3	4	5
10.	Personally praises me when I do outstanding work.	1	2	3	4	5
11.	Challenges me to think about problems in new ways.	1	2	3	4	5
12.	Encourages recruits to be team players.	1	2	3	4	5
13.	Shows us that he expects a lot from us.	1	2	3	4	5
14.	Expresses confidence in my ability to apply the core values.	1	2	3	4	5
15.	Treats each recruit as an individual.	1	2	3	4	5

My Adventurous Training Instructor:		Not at all	Once in a while	Some times	Fairly often	All of the time
16.	Leads by 'doing' rather than simply 'telling'.	1	2	3	4	5
17.	Considers that I have different strengths and abilities from others.	1	2	3	4	5
18.	Gets my group to work together for the same goal.	1	2	3	4	5
19.	Helps group members to develop their strengths.	1	2	3	4	5
20.	Develops a team attitude and spirit among recruits.	1	2	3	4	5
21.	Always gives me positive feedback when I perform well.	1	2	3	4	5
22.	Sets high standards.	1	2	3	4	5
23.	Spends time teaching and coaching recruits.	1	2	3	4	5
24.	Always emphasises trying your best.	1	2	3	4	5
25.	Asks questions that make me think.	1	2	3	4	5
26.	Gives praise to recruits when they improve.	1	2	3	4	5

RECRUIT SELF-REPORT QUESTIONNAIRE 3

Your Personal Details

1. Age (at last birthday): _____ years	2. Service Number: _____
3. Week of Training: _____	4. Current Platoon: _____
5. Activity Group Number: _____	
6. Nationality: _____	7. Is English your first language: <input type="checkbox"/> Yes <input type="checkbox"/> No

Involvement in this study is voluntary and you are free to withdraw at any time. Please read the following information sheet before completing this questionnaire.

What is this questionnaire?

The questionnaire you are being asked to complete is designed to gain a better understanding of the factors influencing the performance of recruits. It asks you about your personal attitude towards training. This is **NOT a test**. There are no right or wrong answers. There are no good or bad answers. We want to know your personal views on the issues raised in the questionnaire.

You may feel that some of the questions are repeating themselves or may not apply to you, but please give your most truthful response to all questions as this will give us a fuller picture of what you experience in training.

Who will see my answers?

The information you give is totally confidential. Only researchers at the University of Wales, Bangor will have access to questionnaires completed by individuals. The report on the findings of this survey will be presented in such a way that it will not be possible for any one individual, Section or Platoon to be identified. All information you provide will be treated in accordance with the Data Protection Act 1998.

Once you have completed the questionnaire, please hand it to the administrator. Your Service Number and section are required purely for data analysis and does not reflect on you in any way.

How long will it take?

There is no set time limit but this questionnaire should take about 15 minutes to complete.

How do I fill in this questionnaire?

Please read each question carefully. For each question you are asked to circle one response which best fits your views. Work quickly, giving your most truthful reply. Respond according to your first reaction. Do not spend too long on one question. An example is shown below:

	Not at all true		Somewhat true			Very true	
I see being loyal as an important part of who I am	1	2	3	4	5	6	7

Core Values

There are a variety of reasons why people adhere to the Army's core values. Please indicate how true each of these reasons are for why you adhere to the core values.

		Not at all True		Somewhat True			Very True	
1.	I must show selfless commitment because I want others to see that I am doing my duty	1	2	3	4	5	6	7
2.	I must conform to the Army's disciplinary codes because I will be punished if I don't	1	2	3	4	5	6	7
3.	I have to be seen to show moral and physical courage to prove to others that I have the guts for the job	1	2	3	4	5	6	7
4.	Respect for others is an important quality that I have learned from the Army	1	2	3	4	5	6	7
5.	I see being loyal as an important part of who I am	1	2	3	4	5	6	7
6.	I must act with integrity so that people will think I am a trustworthy person	1	2	3	4	5	6	7
7.	I should show selfless commitment because otherwise I could not respect myself	1	2	3	4	5	6	7
8.	I adhere to the Army's disciplinary codes because they are an essential part of being a good soldier	1	2	3	4	5	6	7
9.	I try to act with integrity because it is a valuable personal characteristic to live up to	1	2	3	4	5	6	7
10.	I try to be courageous because having the courage to do the right thing is what distinguishes a good soldier from a poor one	1	2	3	4	5	6	7
11.	I must be seen to show selfless commitment so that others can see that I sacrifice my own interests for the good of the Army	1	2	3	4	5	6	7

		Not at all True		Somewhat True			Very True	
		1	2	3	4	5	6	7
12.	I try to show moral and physical courage because both are essential qualities of a good soldier	1	2	3	4	5	6	7
13.	I make the effort to act with integrity because I would feel dishonourable if I didn't	1	2	3	4	5	6	7
14.	I should try to act with integrity because I'd feel guilty if I didn't	1	2	3	4	5	6	7
15.	Being loyal to your superiors and mates is very important to me	1	2	3	4	5	6	7
16.	I have to be seen to show respect for others because I don't want people to think I don't care about others' feelings	1	2	3	4	5	6	7
17.	I try to act with integrity because it is an admirable quality in a soldier	1	2	3	4	5	6	7
18.	I should show moral and physical courage at all times because I would be ashamed of myself if I didn't	1	2	3	4	5	6	7
19.	I try to show selfless commitment because I would feel dishonourable if I didn't	1	2	3	4	5	6	7
20.	It is mainly the threat of punishment that keeps me well disciplined	1	2	3	4	5	6	7
21.	I should stay well disciplined because I would be a poor soldier if I didn't	1	2	3	4	5	6	7
22.	I must be seen to show respect for others because I will get into trouble if I don't	1	2	3	4	5	6	7
23.	I feel proud of the Army's concern for respect for others	1	2	3	4	5	6	7
24.	I must be seen to act with integrity to prove to others that I am honourable	1	2	3	4	5	6	7
25.	Selfless commitment is the cornerstone of being a good soldier	1	2	3	4	5	6	7

		Not at all True		Somewhat True			Very True	
26.	I must be seen to show moral and physical courage because people will think I'm a weak person if I don't	1	2	3	4	5	6	7
27.	I try to stay well disciplined because getting a bad confidential report would make me feel bad about myself	1	2	3	4	5	6	7
28.	I should act with integrity because it would damage my self respect if I didn't	1	2	3	4	5	6	7
29.	I have to be seen to be loyal so that other people will think I am a good soldier	1	2	3	4	5	6	7
30.	If I did not show respect for others I would not be able to respect myself	1	2	3	4	5	6	7
31.	I must be seen to show selfless commitment because I don't want people to think that I'm only interested in looking after number one	1	2	3	4	5	6	7
32.	I should try to be courageous at all times because I would feel very bad about myself if I didn't	1	2	3	4	5	6	7
33.	I should try to remain disciplined because I would not respect myself if I didn't	1	2	3	4	5	6	7
34.	I must be seen to be loyal so that people will think I am dependable	1	2	3	4	5	6	7
35.	I try to show respect for others because it is important to me both as a person and as a soldier	1	2	3	4	5	6	7
36.	I ought to show selfless commitment because otherwise I would feel unworthy	1	2	3	4	5	6	7
37.	I must show moral and physical courage because I don't want people to think I'm a coward	1	2	3	4	5	6	7
38.	I have to be seen to be well disciplined to avoid punishment	1	2	3	4	5	6	7

		Not at all True		Somewhat True			Very True	
		1	2	3	4	5	6	7
39.	I try to act with integrity because it is an essential part of being a good soldier	1	2	3	4	5	6	7
40.	I have to show loyalty to stop people thinking I am unreliable	1	2	3	4	5	6	7
41.	I try to show loyalty because I would not feel fit to be a soldier if I didn't	1	2	3	4	5	6	7
42.	I try to show respect for others because it's what I ought to do	1	2	3	4	5	6	7
43.	I believe that being well disciplined helps me to be a better soldier	1	2	3	4	5	6	7
44.	I try not to doubt my moral and physical courage because otherwise I would feel worthless	1	2	3	4	5	6	7
45.	The idea of selfless commitment inspires me to be a better soldier	1	2	3	4	5	6	7
46.	I have to show integrity so that people will see that I am responsible	1	2	3	4	5	6	7
47.	Being loyal is the right thing to do as a soldier	1	2	3	4	5	6	7
48.	It is important to me to be well disciplined because I am committed to the Army way of life	1	2	3	4	5	6	7
49.	Selfless commitment is an essential quality in a soldier	1	2	3	4	5	6	7
50.	I try to show both moral and physical courage because that is what defines the spirit of a good soldier	1	2	3	4	5	6	7
51.	I try to show loyalty because I would feel guilty if I didn't	1	2	3	4	5	6	7
52.	I try to show respect for others because I would feel unworthy of my cap badge if I didn't	1	2	3	4	5	6	7

		Not at all True		Somewhat True			Very True	
		1	2	3	4	5	6	7
53.	I must be seen to show respect for others because if I don't people will think I am a poor soldier	1	2	3	4	5	6	7
54.	I should show loyalty because otherwise I would feel like a failure	1	2	3	4	5	6	7