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The impact of expressive flexibility and self-control on moral competence following exposure to simulated combat-like environments in 18-22-year-old U.S. Military recruits

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Abstract
The impact on moral competence following exposure to combat-like environments can be found in soldier narratives, however, limited scientific research investigates such effects. Moreover, the influence of one's expressive flexibility and self-control on moral competence following combat-like environments is unknown. Employing a univariate design, this study recruited 107 participants (i.e., ages 18 to 22) from a private U.S. Military university to examine the impact on moral competence, including potential moderating effects of expressive flexibility and self-control, following exposure to combat-like environments. To simulate a combat-like environments, participants were placed in either immersive (i.e., Bravemind) or non-immersive (i.e., Virtual Battlespace 3) virtual environments. Self-reported expressive flexibility, self-control, and moral competence were assessed. Results revealed that following exposure to combat-like environments, an individual's moral competence increased. A main effect of self-control on moral competence indicated that an individual's self-control directly effects an individual's moral competence. Findings from this study offers a richer comprehension of how, following simulated combat environments, moral competence can be influenced, and how expressive flexibility and self-control can aid in protecting mental health and wellbeing, even in judging moral dilemmas.

Keywords: Moral competence, simulation, expressive flexibility, self-control, military

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Introduction

Combat-like environments continue to generate moral and ethical challenges. Military personnel and civilians, alike, must effectively and efficiently solve moral dilemmas and conflicts; for example, a soldier must decide to either use violence in efforts to protect himself or save an adversary while maintaining peer trust and protecting human rights. To successfully execute such challenges, people must possess moral competence (van Baarle, Bosch, Widdershoven, Verweij, & Molewijk, 2015; van Baarle & Bosch, 2011). Moral competence is "the affective orientation to perform altruistic behaviors towards others and the ability to judge moral issues logically, consistently, and at an advanced level of development" (Ma, 2012, 3). Better assessing how combat-like environments impact moral competence is critical not only to understand how people perform during moral challenges, but also in supporting physical and mental well-being, especially as these environments have shown to produce mental health illnesses such as depression and post-traumatic stress disorder (PTSD) (Agaibi & Wilson, 2005).

As our nation has, and continues to be, exposed to a variety of adverse and violent acts on US soil, empirically assessing and investigating the impact of combat-like environments on moral competence is essential. Combat-like environments place individuals in dilemmas that require decision-making and judgment of what is right or wrong, what is beneficial or risky, and what is ethical and unethical (Kim & Kim, 2013). Facing these moral dilemmas and conflicts necessitates the capacity for moral competence; particularly, individuals must make decisions and act in an altruistic manner, while consequently assessing their own character and behavior through a moral lens (van Baarle & Bosch, 2011). The moral judgments and decisions made in these adverse contexts subsequently impacts individual well-being, as well as military operations

success and mission effectiveness (Thompson & Jetly, 2014).

While soldier anecdotes have previously highlighted the impact of combat-like environments on moral competence, there is still a need to assess this impact through a scientific evaluation. The limited research in this field, has revealed how combat-like environments negatively impact the capacity for successful moral navigation (Lind, 2008; van Baarle et al., 2015; van Baarle & Bosch, 2011). None of these previous research studies though, have assessed whether moral competence is influenced by expressive flexibility and self-control, two constructs that are vital in defining human performance and character. Expressive flexibility is the capacity to enhance (e.g., ability to demonstrate improved and heightened potential emotional expression) and suppress (e.g., ability to suppress emotions is characterized as the capacity to demonstrate reduced and repressed potential emotional expression) emotions (Bonanno & Burton, 2013), while self-control is the capacity to regulate attention, behavior, and emotions despite temptation (Duckworth, Taxer, Eskreis-Winkler, Galla, & Gross, 2019).

As our Armed Forces are subjected to combat-like environments, a focus must be placed in evaluating expressive flexibility and self-control as they are key protective factors in individual well-being; the value of comprehending these constructs are incalculable as these adverse contexts and situations can produce permanent physiological and psychological wounds (Chen, Chen, & Bonanno, 2018; Westphal, Seivery, & Bonanno, 2010). It can then be hypothesized that if expressive flexibility and self-control are essential constructs in overcoming the negative impact of adverse environments, then these two constructs could also affect moral competence, an integral competency for effective military performance and mission success.

Impact of Adverse Environments on Moral Competence

An individual with high moral competence must have the mental capacity to assess

how collectively recognized moral values (e.g., social progress, human dignity, equal rights) influence individual actions, behavior, and motives (Ma, 2012). With high moral competence, an individual is able to solve dilemmas and conflicts in accordance with such universally accepted moral principles instead of power (Kim & Kim, 2013). Additionally, an individual with high moral competence is able to adhere to previously universally accepted moral values and recognize the moral dimension of any situation and differentiate which of those principles are at jeopardy in efforts to adequately assess moral conflicts. However, while there are collectively recognized moral values, context can encourage and influence these moral values and ethical principles (van Baarle et al., 2015). For example, in a combat environment, the use of aggression (which contradicts an already collectively recognized moral value) is more likely to be tolerated in this context than in a non-combat environment. Military personnel, especially who are exposed to such environments are typically faced with assessing what is morally wrong or right after context is taken into account.

Moral competence plays a crucial role in successful military operations and leadership effectiveness (Kim & Kim, 2013). For example, a soldier must direct a team through morally challenging contexts during militant acts; morally challenging situations demands moral competence in order to execute ethically sound decisions (de Graaff, de Vries, van Bijlevelt, & Giebels, 2017). All these ethically demanding contexts require individuals who possess moral competence to effectively face and cope with these dilemma-charged and value-burdened situations through objectivity, impartiality, and justice (van Baarle et al., 2015). With such high and far-reaching consequences, especially in combat-like environments, it is critical that soldiers are morally competent as a lack of such competence can lead to risky and potentially life-threatening contexts that have significant humanitarian, operational, or political effects on the community, public, or individual wellbeing (de Graaff et al., 2017). In particular, a soldier must decide to either harm an enemy in allegiance to his country or save an enemy from death without prejudice; these decisions must adhere with universally accepted moral principles.

In 2015, van Baarle et al. revealed that openly confronting moral dilemmas is more complex in a military context. As such, individuals in such adverse environments, must face extremely demanding and challenging moral conflicts during combat, as they must make decisions about how to adhere with their military training and their principles and values (van Baarle & Bosch, 2011). Particularly, Asencio, Byrne, and Mujkic (2017) showed that the US Military has incorporated moral competence in their current ethics training while de Graaff et al. (2017) reported that the Royal Netherlands Army has classified moral competence as a critical moral character traits necessary for mission success and effective military development. Comparable to previous research, the current project explores individuals' moral competence, following exposure to combat-like environment. This study, however, broadens the current work by investigating how individuals' expressive flexibility and self-control impacts these outcomes.

Expressive Flexibility and Self-Control as Impactful Constructs in Moral Reasoning

Expressive flexibility and self-control have been critical elements in successful psychological adjustment and health (Aldao, Sheppes, & Gross, 2015; Bonanno & Burton, 2013; Chen et al., 2018). First, individuals who are high in expressive flexibility have the capacity to enhance emotions (i.e., to demonstrate improved and heightened potential emotional expression) and to suppress emotions (i.e., to demonstrate reduced and repressed potential emotional expression) (Chen et al., 2018); in both in expressive enhancement and

suppression abilities, context and situation are critical. Second, individuals who are high in self-control are able to regulate emotion, attention, and behavior regardless of being tempted or enticed (Duckworth et al., 2019; Tangney, Baumeister, & Boone, 2004). Expressive flexibility and self-control are integral in the successful adaption and acclimation to adverse situations and contexts. For example, research has shown that greater levels of expressive flexibility have shown to function as a barrier against trauma and stressors, (Rodin et al., 2017) by supporting psychopathology (Aldao et al., 2015; Rodin et al., 2017), mental health (Aldao et al., 2015), and psychological adjustment (Bonanno & Burton, 2013). In reference to self-control, research has shown that higher levels of self-control have shown to predict decreased PTSD symptoms (Walter, Gunstad, & Hobfoll, 2010) including depression (Dombrovski et al., 2012), improved psychopathology (Tangney et al., 2004), and positive health behaviors (Melanko & Larkin, 2013).

Expressive flexibility and self-control are essential elements in successful psychological adjustment and health (Aldao et al., 2015; Chen et al., 2018; Westphal et al., 2010). Particularly, the ability of expressively flexibility, both in expressive suppression and in expressive enhancement, including the capability of self-control, is critical in the successful acclimation and adaption to adverse contexts and situations. For example, research has shown that higher levels of expressive flexibility has shown to support mental health (Aldao et al., 2015), improved psychopathology (Rodin et al., 2017), and psychological adjustment (Aldao et al., 2015; Westphal et al., 2010). Lower levels of expressive flexibility have been associated to enduring emotional, cognitive, social, and health costs (Bonanno et al., 2007; Westphal et al., 2010), and decreased well-being (Aldao et al., 2015; Chen et al., 2018). Furthermore, research has shown that greater levels of self-control has shown to sustain life satisfaction and well-being (Hofmann, Luhmann, Fisher, Vohs, & Baumeister, 2014), predict achievement and positive affect (Choi, Lim, Catapano, & Choi, 2018), and positive life outcomes (Duckworth et al., 2019).

While previous studies have assessed the importance of expressive flexibility and self-control, no other studies have examined the impact of expressive flexibility and self-control on moral competence following exposure to simulated combat-like environments. Two constructs that have been shown to support individuals persist during and following adverse environments, expressive flexibility and self-control, were thus chosen for the current study. Based on their role in supporting successful adjustment, expressive flexibility and self-control might mitigate moral competence following combat-like contexts. In efforts to complete this work, immersive and non-immersive technologies were utilized to simulate combat-like environments.

Immersive and Non-Immersive Technologies

The U.S. Army has implemented numerous immersive and non-immersive technologies to train soldiers on how to perform in the field (Department of the Army [DA] ADP 7-0; Kim, Rosenthal, Zielinski, & Brady, 2014). Immersive technologies allow an individual to be fully immersed in a simulated environment through tactile, auditory, and visual apparatuses such as head mounted tracking systems, vibrating floorboards, and body sensors. Non-immersive technologies allow an individual to participate in a simulated environment in a less immersive fashion, through the use of a video screen and controller (Kim et al., 2014).

Research has shown that immersive and non-immersive technologies can induce real- world affect and physiological arousal (Kim et al., 2014; Tamborini, Eastin, Skalski & Lachlan, 2004). Ivory and Kalyanaraman (2009) revealed that participants who were engaged in the immersive simulation reported more emotionality than participants in the non-immersive simulation. Tamborini et al. (2004) revealed that participants in an immersive condition exhibited more aggressive feelings than participants in non-immersive condition. Additionally, recent work has evaluated these technologies as a medium in the treatment of mental health and cognitive disorders; clinical research has shown great promise in treating problems (Kim et al., 2014; Maples-Keller, Bunnell, Kim, & Rothbaum, 2017) However, due to potential for re-traumatization and in-depth training, such technologies can be disadvantageous (Maples-Keller et al., 2017). While not the main focus of this endeavor, this current research will add to the recent work by investigating the impact of immersiveness and simulation on moral competence.

Current Study

While the aforementioned work has shown the negative impact of combat on moral competence in service members, there are limitations in this work. This study assesses individuals' moral competence following exposure to simulated combat environments, and further analyzes the impact of expressive flexibility and self-control on moral competence following exposure to such adverse environments.

Hypotheses

1. Individuals in the immersive simulated conditions would be more morally competent than individuals in the non-immersive conditions.
2. Individuals who are high in expressive flexibility and self-control would present as more morally competent than individuals who are low in expressive flexibility and self-control suggesting that expressive flexibility and self-control will buffer the effects of adverse environments.

Method

Participants

107 participants (66% men and 34% females) were drawn from a private military institution; while the gender ratio was not balanced, this is, however, a true depiction of the ratio of gender at this private US Military university. Over a third of the participants (i.e., ages 18 to 22) were either 18 (34%) or 19 (38%); 40% were freshmen and 34% were sophomores. Individuals with previous combat/military experience, 17 years or younger, and/or sensitivity to immersive and non-immersive technologies were excluded from the study.

Apparatuses and Materials

Bravemind and Virtual Battlespace 3 (VBS3)

The two simulators utilized in this study were Bravemind and VBS3. Bravemind is an immersive, virtual reality system that simulates Iraqi environments; stimuli include improvised explosive devices (IEDs) and missile and gun fire sounds. Users wear a head mounted display system which orients them within the simulation and utilize a video game controller to move around the simulation A vibro-tactile floorboard, Rumblefloor, is utilized to simulate the combat environment vibrations. VBS3 is a first-person military training non-immersive simulation. VBS3 simulates combat scenarios and is utilized for tactical training and mission rehearsal. Participants used a standard laptop, a keyboard, a mouse, and headphones.

Moral Competence Test (MCT) (Lind, 2008)

The 26-item MCT was the first (self-report) scale administered. The MCT assesses a person's capability to evaluate contentious and morally problematic statements through the use of two moral dilemmas (i.e., one with labor workers and one with doctors) in relation to moral oorientations and principles instead of personal opinion in reference to the moral dilemma; the participant is tasked to rate these statements on a Likert-type scale from "I strongly reject" (-4) to "I strongly accept" (+4). The MCT revealed high test-retest correlation (r = .90) (Lind, 2008).

The Flexible Regulation of Emotional Expression (FREE) Scale (Bonanno & Burton, 2013)

The 16-item FREE scale was the second (self-report) scale administered. The FREE scale assesses an individual's capacity to enhance and suppress displayed emotion across a variety of hypothetical contexts; the FREE scale is broken down to four categories: (a) enhancing positive emotion, (b) enhancing negative emotion, (c) suppressing positive emotion, and (d) suppressing negative emotion. Items include "The following scenarios involve NEGATIVE emotion. For each scenario, indicate how well would you be able to be even MORE EXPRESSIVE than usual of how you were feeling: You're attending the funeral of someone you don't know" and "The following scenarios involve POSITIVE emotion. For each scenario, indicate how well would you be able to CONCEAL how you were feeling: You are in a training session and you see an accidentally funny typo in the presenter's slideshow." Findings from Bonanno & Burton (2013) revealed frequency of cognitive reappraisal (= .87) and expressive suppression (= .79).

The Brief Self-Control Scale (BSCS) (Tangney et al., 2004)

The 10-item BSCS was the third (self-report) scale administered. This BSCS assesses dispositional self-regulatory behavior in four facets: thoughts, performance, emotions, and impulses. Items include "I get distracted easily" and "I'm good at resisting temptation." BSCS showed internal reliability (= .85) and test-retest reliability (= .87) (Tangney et al., 2004).

Design

Participants were placed in one of four conditions: Bravemind with simulated combat (n = 27) or non-combat (n = 27) or VBS3 with simulated combat (n = 26) or non-combat (n = 27). Individuals in the simulated combat conditions drove on an Iraqi desert road while being exposed to IEDs and missile and gun fire. Individuals in the simulated non-combat scenario, completed the same scenario, but were not exposed to the combat stimuli. While participants utilized one of the two apparatuses, the VBS3's scenario mirrored the Bravemind's scenario. Participants completed comparable scenarios which allowed for the comparison of the apparatuses.

Procedure

The study was approved by Teacher's College, Columbia University's Institutional Review Board. Volunteers were recruited by word of mouth and received extra credit. Data collection was conducted over two weeks. For the first part of the study, participants partook in one of the conditions for ten minutes; the block randomization method was used to confirm equal sample size for conditions. Participants were then asked to complete the MCT. there was no time restriction to complete the MCT. A week after completing the first part of the study,

participants received a Qualitrics link to complete the scales, the FREE and BSCS. Participants were also asked about their age, gender, and major including their past experience with the apparatuses.

Results

Two univariate ANOVAs were utilized to assess how moral competence was impacted following exposure combat-like environments simulated by non-immersive and immersive technologies, and consequently, how expressive flexibility and self-control mediated the impact of these combat-like environments. For power analysis, G*Power 3.1.9.2 was employed to provide a sample size of 108 participants for medium-sized effects (Cohen's f = .32) with acceptable statistical power (Faul, Erdfelder, Buchner, & Lang, 2009).

Pearson product-moment correlation coefficients were utilized to investigate the relationships amongst the constructs (see Table 1). Findings revealed that expressive flexibility and self-control were significantly correlated to one another (r = .23, p = .016), however, expressive flexibility and moral competence were not significantly associated to one another (r = .08, p = .44, *NS*). Results did reveal a significant relationship between self-control and moral competence (r = .43, p < .001). Participants self-reported as highly self-controlled (M = 4.47, SD = 0.48), and moderately flexible in regulation of emotional expression (M = 11.99, SD = 1.77). There were no significant differences in gender and expressive flexibility (t (105) = 0.45, p = .66, *NS*) or self-control (t (105) = 0.18, p = .86, *NS*). Additionally, there were no significant differences in age and expressive flexibility (F (4, 102) = 1.07, p = .37, *NS*) or self-control (F (4, 102) = 1.10, p = .36, *NS*).

Table 1. Correlational Matrix of Study Measures

	1	2	3	4	5	6	7	8
1. Age	1							
2. Gender	-0.01	1						
3. Class Year	-0.87***	0.02	1					
4. Simulation	-0.11	0.11	0.05	1				
5. Immersiveness	-0.09	0.03	0.13	-0.01	1			
6. Moral Competence	-0.09	0.03	0.07	0.58***	-0.06	1		
7. Self-Control	-0.01	-0.02	0.04	0.52***	0.01	0.43***	1	
8. Expressive Flexibility	0.05	0.04	-0.01	0.16	0.05	0.08	0.23*	1

* = p < .05, ** = p < .01, *** = p < .001

Table 2. Tests of Between-Subjects Effects on Moral Competence

	Type III SS	df	MS	F	^{2}
Self-Control	261.73	1	261.73	3.83*	0.04
Expressive Flexibility	36.66	1	36.66	0.54	0.01
Simulation	1853.83	1	1853.83	27.14***	0.21
Immersiveness	25.93	1	25.93	0.54	0.01
Simulation * Immersiveness	19.71	1	19.71	0.38	0.01
Simulation * Immersiveness * Self-Control	506.78	4	126.70	1.84	0.07
Simulation * Immersiveness * Expressive Flexibility	208.25	4	52.06	0.76	0.03

* = p < .05, ** = p < .01, *** = p < .001

Simulation and Immersiveness on Moral Competence

Significant results revealed a main effect of simulation on moral competence (F (1, 101) = 26.49, p < .001, η_p^2 = 0.21). Participants who partook in the simulated combat conditions (M = 24.63, SD = 10.15) performed better on moral competence than participants who partook in the simulated non-combat conditions (M = 13.10, SD = 5.79) (see Table 2). The findings show that exposure of simulated combat-like environments positively influenced individuals' moral competence following immersion to simulated combat-like environments.

Furthermore, findings revealed no main effect of immersiveness on moral competence ($F(1, 101) = .58$, $p = .48$, $\eta_p^2 = .01$, *NS*) (see Table 2). The results suggest that immersiveness did not positively or negatively impact individuals' moral competence.

Expressive Flexibility and Self-Control on Moral Competence

Results showed a main effect of self-control on moral competence ($F(1, 101) = 3.83$, $p = .05$, $\eta_p^2 = .04$), suggesting that self-control positively influenced participants' moral competence (see Table 2). However, unlike self-control, findings revealed no main effect of expressive flexibility on moral competence ($F(1, 101) = 0.54$, $p = .47$, $\eta_p^2 = .010$, *NS*) (see Table 2).

Expressive Flexibility and Self-Control x Simulation x Immersiveness on Moral Competence

Findings revealed no significant three-way interaction amongst self-control, simulation, and immersiveness, ($F(4, 98) = 1.84$, $p = 0.13$, $\eta_p^2 = .07$, *NS*) or expressive flexibility, simulation, and immersiveness ($F(4, 98) = 0.76$, $p = .56$, $\eta_p^2 = 0.03$, *NS*) (see Table 2).

Discussion

Findings from this endeavor suggest that following exposure to simulated combat environments, regardless of apparatus, an individual's moral competence increases. Furthermore,

an individual's self-control, not expressive flexibility, positively impacted moral competence. Particularly, following exposure to simulated combat environments, individuals might have felt more altruistic and ethical, and consequently, their moral competence heightened. Or potentially, the exposure of simulated combat environments, could have encouraged the need to promote mindfulness in one's individual values and in universally accepted moral principles. More so, as results suggested, an individual's self-control positively impacted moral competence; possibly, individuals with high self-control were more likely to regulate their emotions and impulses which subsequently helped their ability to judge and evaluate challenging moral dilemmas. Due to the presence of moral conflicts in combat-like environments, individuals with high self-control might be more likely to face these conflicts because they are more likely to manage their impulses and emotions; this regulation, in turn, might help support the ability to solve moral problems and dilemmas successfully and effectively.

Limitations

A number of limitations could have influenced the findings. First, this study used a military college population, and the results may not be replicable or generalizable beyond the military sample. Additionally, military universities' curriculums demand a higher level of regulation and self-control that are unexpected in other institutions so this study may also not be generalizable to a civilian college (non-military) population. More so, as these participants were in a military college, they might have presented with stronger presentation effects in terms to their reported self-control and expressive flexibility, than in other non-military populations. This limitation could lower the correlations.

Second, the recruiting process could have been considered a possible limitation since participants volunteered to complete this study as a way to gain extra credit in their respective psychology courses. While recruiting participants from their psychology courses and providing them with extra credit to participate is a common method of recruitment in the social sciences field, there are risks in interpreting studies conducted in this context; perhaps participants were not truly interested in participating in the study and might have not felt the motivation to place effort in each task assigned to them.

Third, each scale that participants completed was self-report; while self-reports are also a common methodology in many behavioral science disciplines, there are many risks to this methodology. Particularly, participants might not have reported truthfully in response to their feelings of self-control or expressive flexibility. Additionally, this study did not obtain baseline self-control, expressive flexibility, or moral competence. The scales were completed a week following the initial study to avoid potential performance bias (e.g., participants reporting themselves as highly self-controlled or highly flexible in regulation of emotional expression following simulated combat); however, it is important to note that the one-week lapse could have allowed for multiple confounding factors to influence self-perceptions, adding noise to the data.

Implications and General Conclusion

Adverse environments such as combat-like environments often generate moral dilemmas and conflicts that individuals are challenged to confront. This study serves as one of the first scientific studies to assess how adverse environments and an individual's self-control and expressive flexibility impact an individual's moral competence following exposure to simulated

combat environments. While anecdotal evidence from soldier narratives have shown how combat-like environments continue to produce moral challenges, which in turn, necessitates that military personnel and civilians, alike, must assess and judge moral dilemmas, empirical work must be conducted. Better understanding how combat-like environments impact moral competence is important not only to assess individuals' moral competence following exposure to simulated combat environments, but also in supporting mental and physical well-being (Agaibi & Wilson, 2005). Additionally, evaluating the influence of self-control and expressive flexibility on moral competence adds to the current literature of in positive psychology.

The value of comprehending the impact of self-control and expressive flexibility on moral competence is incalculable as these constructs are integral factors in fostering mentally healthy individuals, in shaping positive human performance, and in promoting protective mechanisms that shield individuals from adverse environments (Aldao et al., 2015; Dombrovski et al., 2012; Rodin et al., 2017; Tangney et al., 2004; Walter et al., 2010). As most individuals are exposed to some sort of life-threatening experience in their life, it is important that we further examine these positive psychology constructs following adverse environments (Bonanno & Burton, 2013). This study found a significant relationship between self-control and moral competence and suggests the possible relevance of expanding self-control research and further investigating the impact of self-control on moral competence.

Additionally, as both military and civilians, alike, continue to be exposed to adverse contexts and situation, studies like this one can help show how self-control can impact moral competence which can help individuals who are placed in dilemmas that require moral decision-making and judgment. Furthermore, as these moral judgments and decisions made in these adverse contexts impact individual well-being, as well as military operations success and mission effectiveness, it is important that we better understand constructs that can safeguard mental health (Thompson & Jetly, 2014). While expressive flexibility did not impact moral competence, more work looking into such constructs is essential as they are critical protective factors linked with a decreased likelihood of problematic outcomes.

Lastly, as VR technologies become more accessible in US military training, there is a need to better understand the impact of VR technologies on behavior and performance, as this can help us better comprehend behavior and performance in real-world environments (Kim et al., 2014; Maples-Keller et al., 2017). Particularly, as VR technologies can be designed to place military personnel into adverse, hazardous, and life-threatening virtual simulated contexts, without endangering them to real-world risks, continued empirical analyses are critical in VR effectiveness and application, especially in military contexts.

The completion of the research provides support of the impact of adverse environments on moral competence, and then, the influence of self-control and expressive flexibility on moral competence. Prior research has shown that combat-like environments impacts individual performance and behavior (Agaibi & Wilson, 2005). As such, this research endeavored to evaluate individuals' moral competence, in a computer-simulated combat environment, and further examine the effect of self-control and expressive flexibility on moral competence in these adverse environments.

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