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An Examination of College Athletes' Motivation and Athletic Scholarship Status

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Understanding sport motivation and the different components of motivation (intrinsic, extrinsic, amotivation) heightens athletic performance and allows coaches and athletic administrators to proficiently develop and retain college athletes. The purpose of this study was to examine sport participation motivations of NCAA Division I college athletes and investigate the relationship between motivation and athletic scholarship status. Division I college athletes (N = 475) were administered the Sport Motivation Scale (SMS). The data demonstrated college athletes were intrinsically motivated and scholarship status did not influence motivation. Results of this study showed that college athletes were not involved in sport for monetary gain, but rather the participants found self-fulfillment in intercollegiate athletics participation. Prac-

tically, this study can assist stakeholders in better understanding what motivates college athletes and how to keep this population intrinsically motivated.

keywords: college athletes, self-determination theory, scholarship, motivation

Introduction

Every year, more than 490,000 college athletes compete within the National Collegiate Athletic Association (NCAA; n.d.a). Although the NCAA has three classifications (Division I, II, III), only Division I and II membership institutions offer athletics scholarships (NCAA, n.d.b). It is important to note, that the amount of athletics related financial aid a college athlete may receive is contingent upon their sport (NCAA, 2018). In relation to athletic scholarships, the NCAA (2018) offers two classifications of sports: equivalency sports (e.g., baseball, golf, gymnastics, lacrosse, soccer, swimming, track, wrestling) and head-count sport (e.g., football, men's basketball, women's basketball, women's volleyball). Equivalency sports provide a certain number of scholarships that can be divided (full, partial) among athletes on the roster (NCAA, 2018). Head-count sports are allotted a certain number of scholarships; however, the scholarships cannot be divided among the athletes, as such, college athletes in head-count sports are awarded a full athletic scholarship or receive no scholarship (NCAA, 2018).

According to the NCAA (n.d.b), 150,000 college athletes are awarded \$2.9 billion in athletic scholarships each year. Less than 2% of high school athletes will receive an athletic scholarship and only 59% of all Division I college athletes actually receive some sort of athletic aid (Coakley, 2017).

According to Coakley (2017), only 6.8% of all NCAA college athletes receive full scholarships, 27.2% receive partial scholarships, and the remaining 66% receive no athletic scholarships. College athletes may be eligible for academic scholarships as well, and many coaches of equivalency sports take advantage of such opportunities to keep players on their rosters (Lipford & Slice, 2017).

Even though a limited number of college athletes receive an athletic scholarship, the reality is that the costs associated with collegiate sport continue to rise (Sanderson & Siegfried, 2018). Offering athletics related grant-in-aid has become a heavy burden for an institution's athletic department as coaches' salaries and infrastructure continue to consume a large share of athletic spending (Maxcy & Larson, 2015; Sanderson & Siegfried, 2018). The rising costs associated with collegiate sport has led to increased pressures facing college athletes, especially at the Division I level (Rettig & Hu, 2016). Due to the stress and concurring demotivation this population faces, discontinuation of sport participation along with burnout have become issues of concern for athletic departments nationwide (Almodóvar, 2017; Gustafsson, Carlin, Podlog, Stenling, & Lindwall, 2018; Madigan, Stoeber, & Passfield, 2016; Smith et al., 2016). As such, informed by Self Determination Theory (SDT; Deci & Ryan, 1985), the purpose of this study is to examine sport participation motivations of NCAA Division I college athletes and investigate the relationship between motivation and athletic scholarship status.

Literature Review

MOTIVATION

Motivation consists of internal and external variables that induce certain behaviors and effects determination and discipline (Martens & Webber, 2002; Orlick & Partington, 1998; Vealey, 2005; Williams & Krane, 2001). Furthermore, human behavior often institutes motivation, especially in regard to sport where participants strive to find fulfillment and be challenged (Martens & Webber, 2002; Vealey, 2005). Although there are exterior factors that influence motivation (e.g., coaches, parents, teammates, academics), motivation is an individual process (Vealey, 2005).

Motivation plays an important role in college athletes' ability to perform athletically and academically (Vealey, 2005). Higher levels of motivation, specifically, intrinsic motivation, is positively correlated with higher rates of retention and academic success (Amorose, Horn, & Miller, 1994; Gaston-Gayles, 2004; Parker, Perry, Hamm, Chipperfield, & Hladkyj, 2016; Ryan & Deci, 2000; Simons, Van Reenan, & Covington, 1999). Past studies have demonstrated that college athletes that are motivated extrinsically often discontinue sport participation (Alexandra, Stefanos, & Vassilis, 2015; Langan, Tonor, Blake, & Lonsdale, 2015; Martens & Webber, 2002; Oostdam, Koerhuis, Fukkink, & Eur, 2018). On the contrary, research has demonstrated that college athletes who enjoy sport participation tend to be intrinsically motivated (Fransen, Boen, Vansteenkiste, Mertens, & Vande Broek, 2018; Hirko, 2009; Kilpatrick, Hebert, & Bartholomew, 2005; Stokowski, Huffman, & Aicher, 2013).

PSYCHOLOGICAL NEEDS

Deci and Ryan's (1985) SDT posits that well-being and prolonged motivation can be supported if basic psychological needs such as autonomy, competence, and relatedness are met. Autonomy describes the degree to which one feels in control of their own actions and behaviors (Ryan & Deci, 2000). Autonomy is critical because people need to feel that they have the ability to be a causal agent and a decision maker within their own lives. Those who experience autonomy frustration may feel that they do not have a say in their lives or the things they do (Chen et al., 2015). Competence refers to the need of individuals to feel that they are capable of meeting goals; they need to feel challenged but also effective and productive (Ryan & Deci, 2000). Those who may struggle with competence exhibit self-doubt and may feel like they are a failure (Chen et al., 2015). Relatedness refers to the need to feel truly connected with others. For individuals to feel like someone they admire cares about their success. If this need is not met, individuals may feel lonely and isolated, even unwanted (Chen et al., 2015). Athletic departments who are best able to create a sense of autonomy, competence, and purpose in its students may be the most successful in harnessing the productivity of those students (Lyness, Lurie, Ward, Mooney, & Lambert, 2013). As such, athletic departments have begun to care for college athletes in a holistic manner, focusing on athletic, academic, and social well-being (Monda et al., 2015). The intent is that by focusing on college athlete well-bring, this population will not become overwhelmed and burnout (Monda et al., 2015). Furthermore, by engaging and motivating students to succeed athletically and academically, coaches get to keep their jobs and the university continues to bolster its bottom line (Monda et al., 2015).

SELF-DETERMINATION THEORY

According to Vealey (2005), motivation consists of variables that guide behaviors (e.g., commitment, persistence, self-control). Motivation describes the likelihood that one will engage in an action (Deci & Ryan, 1985). The more motivation to engage in an action, the more likely one is to participate and engage willfully with the action. Motivation consists of factors that drive behavior and influence self-control, commitment, and effort (Vealey, 2005).

As proposed by Deci and Ryan (1985), SDT describes the degree to which motivation is autonomous versus controlled. It is an approach to understanding human motivation, self-regulation, personality and social development (Deci & Ryan, 1985). STD (Deci & Ryan, 1985) characterizes three forms of motivation: intrinsic, extrinsic, and amotivation.

Intrinsic Motivation. There are different types of intrinsic motivation: to know, to accomplish, and to experience (Deci & Ryan, 1985). Intrinsic motivation to know is the desire to seek out knowledge and information (Deci & Ryan, 1985). Those who are motivated to know enjoy learning and are more likely to be intrinsically motivated to seek out such information (Deci & Ryan, 1985). Intrinsic motivation to accomplish represents the need for one to feel competent in their environment and accomplishments are prototypically seen as measures of competence (Deci & Ryan, 1985). Such motivation is provided by the individual's sense of satisfaction as a result of completing a difficult task. Intrinsic motivation to experience stimulation is powered by the feelings of sensory pleasure, fun, and excitement that one may feel while engaging in an activity (Deci & Ryan, 1985).

Extrinsic motivation. Extrinsic motivation is often designated in to three types: identified regulation, introjected regulation, and external regulation (Deci & Ryan, 1985). *Identified regulation* occurs when the value of the activity has been recognized, but still yields extrinsic results, controlled by the completion of the activity (Deci & Ryan, 1985). Those motivated by identified regulation do so because the activity has become imbedded in their lives, in essence, a monotonous task (Deci & Ryan, 1985). Introjected regulation represents activities that are motivated by the internal guilt and anxiety that one may experience if they do not engage in such activities (Deci & Ryan, 1985). Those who feel obligated to participate in an activity are motivated through introjected regulation (Deci & Ryan, 1985). External regulation is the completion of actions that are completely controlled by external rewards and punishments (Deci & Ryan, 1985). Those who participate in sport only for the praise and accolades it brings them are motivated by external regulation (Deci & Ryan, 1985).

Amotivation. When results and outcomes are not tied to effort, amotivation is transpiring (Deci & Ryan, 1985). Such individuals who find themselves in an amotivated state are neither extrinsically nor intrinsically motivated (Deci & Ryan, 1985). Simply, individuals who are amitivated do not recognize why they are participating (Deci & Ryan, 1985; Vealey, 2005). Deci and Ryan (1985) describe amotivation as participating without a full understanding of why, in essence, going through the motions. Those who are amotivated may not feel competent, purpose, or autonomy over their future (Deci & Ryan, 1985). Like extrinsic motivation, amotivation has been strongly associated with burnout and discontinuation of sport participation (Al-

modóvar, 2017; Gustafsson et al., 2018; Madigan et al., 2016; Oostdam et al., 2018; Smith et al., 2016).

MOTIVATIONS FOR PARTICIPATING IN SPORT

To understand the motivation of collegiate athletes, sport participation motivation must assessed first in nonstudent athletes. College students generally participate in co-curricular or intramural sports for a variety of reasons: competition, affiliation, enjoyment and challenge are the most commonly reported responses (Kilpatrick et al., 2005). Competition allows former high school athletes to continue to fulfill the need for competitive interaction. Organized sport creates a social atmosphere, which is an integral part of the college experience and may fulfill the basic psychological need of relatedness. Some simply do value sports for its intrinsically motivating properties and play for the social component while others appreciate a challenge. It appears that all of the motivating factors that motivate non-student athletes to compete in sport are intrinsic; they play for the satisfaction of the activity (Kilpatrick et al., 2005).

College athletes have their own unique set of motivations for playing college sports. Letwasky, Schneider, Pedersen, and Palmer (2003) researched that very question in Division I college athletes and found that degree program options, head coach, academic support services, and location were all critical in the selection of institutions. Other studies have found that the opportunity for financial aid and playing time are very important (Hu & Hossler, 2000; Pauline et al., 2004). Such reasons appear to be more extrinsic in nature; athletes are motivated to compete by the rewards/exposure and success they may experience, not necessarily the internal satisfaction and enjoyment as do non-student athletes.

Scholarship vs. Non-scholarship athletes. There are many factors that contribute to the difference in motivation of college athletes; the most evident may be scholarship status (Kingston, Horrocks, & Hanton, 2006). Scholarship athletes and non-scholarship athletes have very different motivations for engaging in sport (Amorose & Horn, 2000, 2001; Kingston et al., 2006; Ryan, 1980). Scholarships exist as a regulator of motivation; the source is exterior to the person, the person engages with an activity so that they are able to enjoy the benefits of the scholarship (Kingston et al., 2006). Therefore, scholarship athletes should be extrinsically motivated to compete in sport as previous research has found (Amorose & Horn, 2000, 2001; Amorose et al., 1994; Kingston et al., 2006; Ryan, 1980).

Amorose et al. (1994) found evidence of this phenomenon precisely: scholarship athletes displayed lower levels of intrinsic motivation. The scholarship itself is an extrinsic driver of behavior and appeared to engage scholarship athletes, while non-scholarship athletes played for the love and satisfaction of the sport (Kilpatrick et al., 2005). Collegiate football players as far back as 1980 have reported that they enjoyed football less than athletes not on scholarship (Ryan, 1980). Kingston et al. (2006) examined scholarship status and gender. The results of the study provided "converging evidence that rewards such as scholarships can undermine intrinsic motivation" (Kingston et al., 2006, p. 53). Furthermore, the study concluded that scholarships "could foster non-self-determined forms of motivation" (Kingston et al., 2006, p. 53).

Readdy, Raabe, and Harding (2014) assessed the changes in motivation within a football program as a result of an extrinsic reward and found that such activities increased intrinsic motivation. The data revealed a decrease

in extrinsic regulation, as such, the extrinsic rewards were enjoyable and thus related to satisfaction, pleasure, and intrinsic motivation more so than extrinsic. Readdy et al. (2014) suggested that external rewards may not be necessary to motivate players, but they do not necessarily hurt either.

Like individual differences, coaching behaviors may have a profound impact on motivation (Amorose et al., 1994). This introduces the notion of social support and the role it plays in the motivation of college athletes. Harrison, Martin, & Fuller (2015) found that scholarship athletes rely heavily on coaches, teammates, and other members of the university in various ways and that negative feedback from such individuals significantly decreases motivation. Tudor (2009) explored scholarships status and motivation among collegiate softball players. The results demonstrated that college athletes who were non-starters were more likely to suffer from amotivation when compared to those who started. However, Tudor (2009) reported that scholarship status did not have a significant difference regarding motivation.

Motivational Consequences. While such factors may initially motivate college athletes to engage in sport, the types of motivation they experience while participating have serious implications not only on the field but in the classroom. Those who are extrinsically motivated are more likely to discontinue sport participation, especially upon receiving negative feedback (Harrison et al., 2015; Martens & Webber, 2002). Furthermore, individuals with high levels of intrinsic motivation may experience prolonged motivation to compete and succeed both athletically and academically. Individuals who are amotivated or extrinsically motivated may experience fewer positive outcomes. Scholarship col-

lege athletes who are more intrinsically motivated are more likely to be retained and graduate (Harrison et al., 2015; Martens & Webber, 2002).

College athletes who are self-determined (e.g., intrinsically motivated) have the most favorable attitude toward their scholarship and role within athletics (Graves, Cullen, Lester, Ruderman, & Gentry, 2015). Such students may be more likely to be retained and graduate as well (Graves et al., 2015). Higher levels of self-determination are also positively correlated with higher levels of academic achievement. Intrinsic motivation often leads to persistence as such motivation is not contingent upon extrinsic rewards (Froiland & Worrell, 2016).

Purpose of the Study

Division I college athletes are unique, their skills have become largely commercialized and they are thereby subject to greater levels of stress and pressure from outside sources (Sanderson & Siegfried, 2018; Rettig & Hu, 2016). Previous studies (e.g., Amorose et al., 1994; Ryan, 1980) have only examined intrinsic motivation yet have filed to consider the entire range of self-determination motivation types. This study utilized the Sport Motivation Scale (SMS) originally developed Briere, Vallerand, Blais, and Pelletier (1995), which specifically measures each type of extrinsically regulated motivation as well as intrinsic motivation and amotivation as noted in the SDT. The motivational status of Division I college athletes has also not been assessed using the SMS (Briere et al., 1995) in reference to the difference between scholarship and non-scholarship athletes. The SMS is a unique instrument that accounts for motivation along the STD continuum of motivation including amotivation (Almodóvar, 2017; Gustafsson et al., 2018; Madigan et al., 2016; Oostdam et al., 2018; Smith et al., 2016). It is important to understand what motivates college athletes to participate in sport (Briere et al., 1995). As such, informed by SDT (Deci & Ryan, 1985), the purpose of this study was to gain a better understanding of participation motivation and scholarship status of Division I athletes. Specifically, this study strived to answer the following research questions:

RQ1: Are Division I college athletes motivated to participate in their sport due to intrinsic motivation, extrinsic motivation, or amotivation?

RQ2: Do the sport participation motivations of Division I college athletes differ due to athletic scholarship status?

Methods

PARTICIPANTS

In line with Stokowski et al. (2013) study which examined motivations of international college athletes, participants (NCAA Division I college athletes) were recruited with the assistance of the National Association of Academic and Student-Athlete Development Professionals (N4A). Upon receiving approval from the Institutional Review Board (IRB), the SMS and the demographic questionnaire was sent via email to the N4A research committee, which then distributed the survey to all N4A members. N4A members at Division I institutions were asked to disperse the instrument via email among college athletes. In accordance with Stokowski et al. (2013) study, to increase the sample size, the N4A re-sent the email two weeks after the initial

invitation to participate. A total of 475 Division I college athletes, representing 27 different sports, participated in this study. Of the 475 college athletes, 315 (66.3%) identified as female, 147 (30.9%) reported receiving a full athletic scholarship, 242 (50.9%) reported receiving a partial athletic scholarship, and 86 (18.1%) did not receive an athletic scholarship.

INSTRUMENT

The SMS has been shown to be a reliable and valid method for examining college athletes (e.g., Bhatnager & Karageorghis, 2008; Kingston et al., 2006; Martens & Webber, 2002; Stokowski et al., 3013). The seven sub-scales of SDT are addressed through a 28-item survey (one sub-scale for each type of motivation). Each of the 28 items includes the prompt "I practice my sport because..." with an accompanying statement to which participants are instructed to indicate to what extent each item is a reason they practice their sport. Responses are recorded in the form of a seven-point Likert-scale ranging from "completely disagree" to "completely agree."

DATA ANALYSIS

Using SPSS, descriptive statistics were computed for each category of motivation. Empirical observation was used to address research question one. To address research question two, a multivariate analysis of variance (MANOVA) was performed.

Results

TYPE OF MOTIVATIONS USED BY DIVISION I ATHLETES

The first research question asked, are Division I college athletes motivated to participate in their sport due to intrinsic motivation, extrinsic motivation, or amotivation? A comparison of averages showed the highest average score is from the intrinsic motivation subscale. The three groups produced the same rank order of motivation subscales, with intrinsic motivation toward stimulation was the highest mean score for full scholarship (M= 5.39, SD= 1.17), partial scholarship (M=5.42, SD= 1.11) and non-scholarship (M=5.34, SD=1.20) college athletes (see Table 1).

MOTIVATIONS BASED ON SCHOLARSHIP STATUS

The second research question asked, if sport participation motivation of Division I college athletes differs based on scholarship status. The SMS results showed coefficient alpha = .71 which suggests the test is measuring the same construct and has acceptable internal consistency reliability. The MANOVA revealed no significant multivariate effect (Λ = .995, F(6, 940)= .422, p= .864) and a small effect size (η^2 = .003) regarding participation motivation. As such, less than one percent (0.3%) of the total variability in motivation can be explained by the variability in the three scholarship groups. This finding leads to the conclusion that there is not significant evidence to believe athletic scholarship status impacts motivation.

Table 1

Means and Standard Deviations for SMS Scores
(3 Subscales) of NCAA Division I College Athletes (N=475)

Subscale	All Student Athletes	l Athletes	Full Scholarship	III trship	Partial Scholarship	tial ırship	Non-scholarship	olarship	Cronbach's Coefficient
	(n = 475)	(5)	(n = 147; 30.9%)	30.9%)	(n = 242; 50.9%)	: 50.9%)	(n = 86;	(n = 86; 18.1%)	Alpha
	M	SD	M	SD	M	SD	M	SD	
IM	5.39	1.17	5.39	1.26	5.42	1.11	5.34	1.20	68.
EM	4.40	1.06	4.39	1.10	4.41	1.01	4.36	1.11	.73
AM	2.10	1.28	2.05	1.29	2.07	1.27	2.28	1.29	

Discussion

Past studies have demonstrated that college athletes are intrinsically motivated (e.g., Fransen et al., 2018; Hirko, 2009; Kilpatrick et al., 2005; Stokowski et al., 2013). Although no significance was found, it is extremely positive that the college athletes in the present sample reported high means scores, especially in the area of intrinsic motivation (Ryan, 1980). As such, it can be inferred that participants in the present study found sport participation to be fun and exciting (Deci & Ryan, 1985; Vealey, 2005). College athletes that report high levels of intrinsic motivation also are less likely to discontinue sport participation (Amorose et al., 1994; Harrison et al., 2015; Martens & Webber, 2002) and are more likely to experience academic success (Amorose et al., 1994; Gaston-Gayles, 2004; Parker et al., 2016; Ryan & Deci, 2000; Simons et al., 1999). Furthermore, the college athletes in this sample felt gratification from competing which supports previous studies (Deci & Ryan, 1985; Vealey, 2005). Perhaps the participates reported high levels of intrinsic motivation because their basic psychological needs were being met. The more satisfied such needs are, the more likely an individual is to be intrinsically motivated (Ryan & Deci, 2000). Athletic departments that create a sense of autonomy, competence, and purpose among college athletes often see an increase in productivity among this population (Lyness et al., 2013). Furthermore, the holistic approach being taken by some athletic departments to meet the psychological needs of college athletes could be another reason this population reported high level of intrinsic motivation (Monda et al., 2015).

The second research question examined the difference in sport participation motivations and athletic scholarship status. SDT (Deci & Ryan, 1985) describes external regulation (a type of extrinsic motivation) as participating for reward or recognition. The data in the present study showed that scholarship status did not influence motivation. Kingston et al. (2006) believe that "scholarships can undermine intrinsic motivation" (p. 53). However, the results of the present study did not correspond with Kingston et al. (2006) findings. It is important to note that athletes who are intrinsically motivated participate in sport because they relish in the experience (Deci & Ryan, 1985; Vealey 2005). As such, the college athletes in the present study were not involved in sport for monetary gain, but rather the participants found self-fulfillment in intercollegiate athletics participation. Despite no significant results being reported, the present study is in line with Tudor's (2009) work in that scholarship status was not found to contribute to motivation.

Conclusion

LIMITATIONS

Although this study involved 475 Division I college athletes, there was a lack of male participants (33.7%) as well as subjects from head count sports (21.3%). Further, due to the sampling procedure, how many college athletes actually received the survey is unknown. Therefore, a sample size could not be determined. Also, motivation is on a continuum and constantly changing (Deci & Ryan, 1985). One day a college athlete can be intrinsically motivated, and the next, extrinsic factors (e.g. avoid punishment, obligation) influence sport participation (Deci & Ryan 1985; Vealey 2005). As such, the findings of this study should not be generalized.

FUTURE RESEARCH

The present study demonstrates the need for future research. Future inquiry should examine motivation in regard to sport (e.g., basketball, football), gender, conference affiliation, and NCAA membership classifications (Division I, II, III). Further research should also look at sport motivation mediated by other variables (e.g., academic success, career aspirations, perception, quality of life). Lastly, although the SMS is an acceptable scale perhaps researchers should employ an alternative instrument(s) when exploring motivation.

IMPLICATIONS

Given the financial benefits bestowed upon universities that produce championship athletic teams, college coaches are under pressure to produce winning results (Rettig & Hu, 2016). According to Martens and Webber (2002), college athletes' motivation is "directly related to the intensity of participation and persistence of effort" (p. 256). However, college athletes spend a significant amount of their time on undertakings related to sport (New, 2017). Therefore, understanding how college athletes are motivated is critical in optimizing athletic performance.

Although the purpose of this study is to examine sport participation motivations of Division I college athletes, practically, there are several strategies that coaches can utilize to increase intrinsic motivation among the college athlete populations. Goal setting is an effective way to keep athletes intrinsically motivated (e.g., Sullivan & Strode, 2015). Further, offering constructive, timely, and appropriate feedback can assist college athletes in staying positively motivated (Coker, 2013; Strube & Strand, 2015). Borghi, Bor-

ges, Menegassi, and Rinaldi (2017) suggest in order to keep athletes intrinsically motivated coaches should adapt a non-autocratic coaching style "which focuses on training instruction and help in social support" (p. 2599). Vealey (2005) believes allowing athletes to conduct practice and play a variety of positions leads to autonomy which intern increases intrinsic motivation. More recently, Sheehan, Herring, and Campbell (2018) noted the importance of sleep and intrinsic motivation.

Research supports that athletes who are intrinsically motivated have an increased enjoyment of sport participation (Hirko, 2009; Kilpatrick et al., 2005). Understanding sport motivation allows coaches and athletic administrators to efficiently develop and retain student-athletes. In theory, college athletes who are receiving an athletic scholarship would be extrinsically motivated through external regulation, when compared to those not on scholarship (Deci & Ryan, 1985; Vealey, 2005), after all, it is human nature to seek reward (Vealey, 2005). The results of the present study demonstrated that perhaps athletic departments incorporating a more holistic approach to athlete development (Borghi et al., 2017; Chen et al., 2015; Lyness et al., 2013; Monda et al., 2015; Sheehan et al., 2018) and meeting the basic psychological needs of college athletes (Deci & Ryan, 1985) is further motivating this population. As such, to help this population remain intrinsically motivated athletic departments should continue to develop college athletes through holistic means, ensuring autonomy, competence, and relatedness are met.

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