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# Examining Academic Performance of Polynesian Student-Athletes Using the Theory of Planned Behavior

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A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Master of Science

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#### **ABSTRACT**

## Examining Academic Performance of Polynesian Student-Athletes Using the Theory of Planned Behavior

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This study used Ajzen's (1991) Theory of Planned Behavior (TPB) to explore Polynesian student-athletes' motivation to improve academic performance (AP), while participating in Division I (D1) college football. Specifically, this study examined how attitude, subjective norms and perceived behavioral control influence motivation to achieve a higher GPA. Furthermore, ethnic identity, family obligation and cultural values were examined as potential contributors to subjective norms. The sample consisted of 70 Polynesian football studentathletes at 10 U.S. D1 universities. A modified TPB questionnaire was used to assess the TPB variables (attitude, subjective norms, and perceived behavioral control) as contributors to Polynesian football student-athletes academic, athletic, and career motivation toward achieving a higher GPA. A factor analysis indicated family obligation and cultural values were contributors to subjective norm. Further, a stepwise regression analysis indicated subjective norm was a consistent predictor of academic, athletic, and career motivation. Positive relationships were also found between perceived behavioral control and athletic motivation, as well as, attitude and academic motivation. Although AP was not predicted in this study, findings highlight the impact of Polynesian football student-athletes perceived social pressure from family and culture on their academic, athletic, and career motivations. Findings provide implications for advisors, administrators, and scholars.

Keywords: motivation, academic performance, minority, student-athlete, Polynesian



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"Ehara taku toa, he takitahi, he toa takitini"

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# Examining Academic Performance of Polynesian Student-Athletes Using the Theory of Planned Behavior

The academic performance (AP) of student-athletes is regularly examined by scholars and administrators (Comeaux & Harrison, 2011; Gaston-Gayles 2004; 2005; NCAA, 2012). The expectations for college student-athletes to excel on the field and in the classroom can be an arduous task. They are often asked to serve two masters with different and potentially competing motivations (Woodruff & Schallert, 2008). In addition, the prospect of a professional sporting career poses another type of motivation to consider in relation to AP (Gaston-Gayles, 2005). While it is clear an education can "serve as a more dependable vehicle for a lifetime of career and financial opportunities" (Bimper, Harrison, & Clark, 2013, p. 108), knowing which factors influence or predict student-athletes' academic behavior is unclear. One theory which may provide clarity is Ajzen's (1991) Theory of Planned Behavior (TPB).

The Theory of Planned Behavior (Ajzen, 1991) has been used to successfully predict academic behavior. It suggests behavior is driven by an individual's intention. Three major determinants which influence intention are (1) attitudes toward the behavior, (2) subjective norm (e.g. sociocultural factors), and (3) perceived behavioral control (Ajzen, 1991). Perceived behavioral control can also directly influence both intention and behavior (Manning, 2009). Ajzen (1991) states, "intentions are assumed to capture the motivational factors that influence a behavior" (p.181), meaning intentions reflect the degree of effort, or level of motivation, individuals exert toward specific tasks. Using intention and motivation synonymously, the TPB provides a pragmatic framework to examine those factors which motivate and predict the AP (see Figure 1) of Polynesian college student-athletes (Davis, Ajzen, Saunders, & Williams, 2002; Lipnevich, MacCann, Krumm, Burrus, & Roberts, 2011; Richardson & Abraham, 2013).



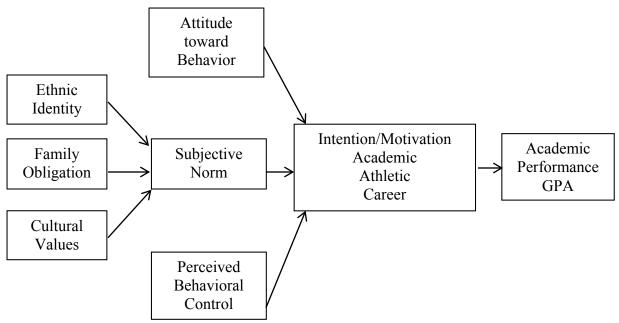


Figure 1. The Theory of Planned Behavior according to current study's variables.

Polynesians and other ethnic minority students generally do not experience the same level of academic success as their Anglo peers (Gaston, 2002; Kalavite, 2010). Issues related to culture, social relationships and identity have been examined to better understand this disparity and to account for the variance in AP between Anglos and ethnic minorities (Comeaux & Harrison, 2011; Fuligni, Tseng, & Lam, 1999; Sellers, 1992). Given the TPB's consideration of subjective norm and the impact it can have on ones' intentions, it seemed appropriate to examine its relevance for a specific cultural group. For the purpose of this study, male Polynesian student-athletes were selected. Subjective norm factors such as ethnic identity, family obligation and cultural values have been found to influence motivation toward AP among ethnic minorities (Fuligni, 2001; Fuligni & Pedersen, 2002; Mayeda, & Okamoto, 2002; Perreira, Fuligni, & Potochnick, 2010). These factors however, have not been empirically tested with Polynesian student-athletes within the TPB framework.

Therefore, the purpose of this study was to examine how attitude, subjective norms, and perceived behavioral control influence academic, athletic, and career motivation to improve AP



among male Polynesian student-athletes participating in Division I (D1) college football.

Furthermore, subjective norm was explored through the lens of ethnic identity, family obligation, and cultural values.

#### Literature Review

#### **Academic Performance**

The AP disparity between White and ethnic minority students has been regularly discussed (Dekker & Fischer, 2008; Noguera, 2003; Otunuku & Brown, 2007; Pang, Han, & Pang, 2011; Reynolds, Fisher, & Cavil, 2012). Early studies suggested cultural conflict with school environment and culture, language barriers, biological and genetic differences, and perceptions of bleak future career opportunities as contributing factors to this academic achievement gap (Benbow & Stanley, 1980; Ogbu, 1984; 1987). Recent studies relate stereotype threat, socioeconomic disparities, and racial discrimination to ethnic minority students underperforming academically (Logel, Walton, Spencer, Peach, & Mark, 2012; Nguyen & Ryan, 2008). Standard measures of AP (e.g. GPA and test scores) tend to undermine and underestimate the true academic ability and performance of ethnic minority students (Walton & Spencer, 2009). Thus, non-cognitive variables (e.g. culture, ethnic identity, motivation) have been found to be more informative than cognitive variables (e.g. GPA, standardized tests) when ascertaining AP among minorities and students in post-compulsory education (Dennis, Phinney, & Chuateco, 2005; Hyatt, 2003; Reynolds et al., 2012; Richardson & Abraham, 2013; Sedlacek, 1999; Simons & Van Rheenen, 2000; Tracey & Sedlacek, 1985). Dennis et al. (2005), for example, found personal and career motivation to be an important predictor of GPA among first generation ethnic minority college students. Another population where motivational types have been assessed as predictors of AP is college student-athletes (Snyder, 1996).



Student-athletes and academic performance. Many studies have examined college student-athletes' AP in an attempt to uncover reasons for differences between individuals' AP (Comeaux & Harrison, 2011; Dilley-Knoles, Burnett, & Peak, 2010; Milton & Gottschalk, 2010; Sedlacek & Adams-Gaston, 1992). For example, in examining the success of an academic support program for college student-athletes at a Division II university, Dilley-Knoles and colleagues (2010) found the overall GPA was higher for female student-athletes than their male peers, and this finding is consistent with other studies (Gaston-Gayles, 2004; Milton & Gottschalk, 2010; Shuman, 2009). Research has also shown Whites have higher GPAs than ethnic minorities (Gaston-Gayles, 2004; Reynolds et al., 2012), and ethnic minorities who participate in revenue sports (football and basketball), have the lowest graduation rates (Gaston-Gayles, 2004; Hyatt, 2003; Sellers, 1992). In sum, male minority student-athletes who participate in revenue sports are most noticeably at-risk academically.

Most of the previous scholarly work in AP disparity, however, has been conducted through the limited scope of Whites contrasted with Blacks. This narrow perspective however, leaves much of the uniqueness of other ethnic groups unexplored (Sellers, 1992; Tracey & Sedlacek, 1985; Steinfeldt, Reed, & Steinfeldt, 2010), for example, Polynesian student-athletes.

#### **Polynesian Student-Athletes**

Over the last decade, hundreds of Polynesians have been recruited to play college football (Irick, 2011). Many young male Polynesians view their physical prowess as an opportunity to advance professionally, and hope to contribute financially to their families (Zakus & Horton, 2009). However, individuals will retire from football (either college or professional), making the implications of AP pertinent to future stability when transitioning to the next phase of their lives.

Generally grouped with the Asian population, the AP of Polynesians has been largely marginalized (Kawaguchi, 2003; Zakus & Horton, 2009). Given the different sociocultural norms and customs found in each aggregate, grouping Polynesians and Asians together impedes the true cultural perspective of both ethnic groups (Mayeda & Okamoto, 2002; Pang et al., 2011). This clustering can also misconstrue the actual AP of Polynesian students (Pang et al., 2011; Saltiban, 2012). Therefore, specific attention should be given to Polynesian students in order to implement effective strategies to promote academic success within this group. Ajzen's (1991) TPB is one theory which may aid this process.

#### Theory of Planned Behavior

The TPB has been used to predict academic behavior (Davis et al., 2002; Richardson & Abraham, 2013; Lipnevich et al., 2011), and may be useful predicting the AP of Polynesian student-athletes. A central tenet of the TPB is the intention to perform a specific behavior. Intention refers to an individual's readiness to perform the given behavior, and is an immediate antecedent of behavior (Ajzen & Driver, 1992; Davis et al., 2002). The strength of intention differs from individual to individual, thus reflecting the degree of effort exerted by the individual, or their level of motivation, toward accomplishing a given behavior (Ajzen, 1991; Richardson & Abraham, 2013). As a result, the TPB has been widely used as an applied social cognitive model of motivation (Richardson & Abraham, 2013).

**Intention.** Different types of student-athletes' motivation have been examined in relation to AP (Gaston-Gayles, 2005; Sellers, 1992; Snyder, 1996; Shuman, 2009). Gaston (2002) was one of the first scholars to directly examine academic and athletic motivation as non-cognitive variables in predicting AP among D1 level college student-athletes. Additionally, Gaston found a third type of motivation unique to student-athletes: career athletic motivation.



Where athletic motivation measured a student-athletes' desire to succeed in sports, career athletic motivation measured a student-athletes' desire to succeed in sports and pursue sports as a professional career. These tenets of motivation are unique to student-athletes because to be successful in the college student-athlete environment, they must be motivated to succeed both on the athletic field/court and academically. Gaston (2002) defined motivation as the "degree which individuals are directed toward, make choices about, persist on, and apply effort toward a given task" (p. 11). This parallels what Conner & Armitage (1998) state about intentions: "intentions represent a person's motivation in the sense of her or his conscious plan or decision to exert effort to enact the behavior" (p. 1430). Keeping in line with the TPB, this study examined academic, athletic, and career motivation as academic, athletic, and career intention.

The struggles of effectively balancing effort and time between being a student and an athlete can impact college student-athletes AP (Gaston-Gayles, 2004; Simons, Van Rheenen, & Covington, 1999; Woodruff & Schallert, 2008). Gaston (2002) found female student-athletes had higher academic motivation than males, and male student-athletes who participated in revenue sports had higher athletic and career motivation than non-revenue sport student-athletes. Sellers (1992) found Black student-athletes who participated in revenue sports were no less motivated to study than their White counterparts, and placed no less importance on obtaining their degree. In her study of D1 college student-athletes, Gaston-Gayles (2004) found academic motivation to be a key predictor of AP. Further athletic and career motivation did not detract from AP, which contradicted previous studies (Sellers, 1992; Simons et al., 1999). Thus, more studies which explore the effectiveness of using motivation as a predictor of AP are needed to develop consistency within this line of research.



Given the mixed results found using academic, athletic, and career motivation as indicators of AP, the TPB presents an empirically sound framework to predict behavior (Ajzen, 1991). It can be assumed the stronger an individual's intention towards achieving a higher GPA, the more likely one will work towards and achieve a higher GPA. Three factors which influence an individual's intention to achieve a higher GPA are attitude, subjective norms, and perceived behavioral control (Armitage & Conner, 2001).

Attitude toward behavior. Attitude refers to "an individual's general affective and cognitive orientations toward a given behavior" (Shen, McCaughtry, & Martin, 2008, p. 843). Attitude is influenced by an individual's salient behavioral beliefs concerning the positive or negative outcomes of a specific behavior (Ajzen, 2001; Davis et al., 2002).

**Subjective norm.** Subjective norm refers to "the perceived social pressure to perform or not to perform the behavior" (Ajzen & Driver, 1991, p. 188). Subjective norm is influenced by one's salient normative beliefs. These beliefs are concerned with the perceived expectations from important referent individuals or groups, (e.g. family members, peers, coaches etc.), and their approval or disapproval of the given behavior (Ajzen, 1991). An individual's motivation to comply with the perceived expectations of different referents influences their intention to perform the behavior (Davis et al., 2002).

Family and culture are extremely important to Polynesians (Zakus & Horton, 2009). The pressures one perceives from their family and cultural duties, as well as the motivation to comply with those expectations can facilitate or impede an individual's performance of the behavior. Hence, this study used ethnic identity, family obligation and cultural values as contributors of subjective norm, to examine its influence in predicting AP.



Ethnic identity. Phinney and Ong (2007) referred to ethnic identity as being multi-faceted and "derived from a sense of peoplehood within a group, a culture, and a particular setting" (p. 271). For Polynesians, success belongs to their people, not the individual, and so too with failure (Zakus & Horton, 2009). Thus, a Polynesian student-athlete may comply with the perceived social pressure from their ethnic group to achieve a higher GPA due to the implications an education yields for the individual, his family, and his people.

Family obligation. Family obligation refers to the "extent to which family members feel a sense of duty to assist one another and to take into account the needs and wishes of the family when making decisions" (Fuligni & Pederson, 2002, p. 856). Ethnic minority individuals, including Polynesians, tend to feel a greater sense of duty and obligation toward their families than American individuals, which influences motivation toward academic tasks (Fuligni, 2001; Tseng, 2004; Zakus & Horton, 2009). For Polynesians, this sense of duty and obligation stems from the deep sense of respect given to parents and elders because of the physical and financial sacrifices they have made to provide for the family (Kearney & Donaghy, 2010; Saltiban, 2012). These sacrifices can either motivate or restrict Polynesian student-athletes as they seek to realize their aspirations for the sake of their family (Kearney & Donaghy, 2010; Zakus & Horton, 2009).

Cultural values. Cultural values refer to "culturally inculcated and endorsed sets of preferences and endorsements for ways of thinking and being" (Podsiadlowski & Fox, 2011, p. 7; Phinney, 1990) as shared by the specific culture. Integral parts of the Polynesian culture include: the ability to give back to their people and their family (Tengan & Markham, 2009), obey and respect the elders (Franks, 2009), and engage in spiritual devotion (Zakus & Horton, 2009). While these values are attractive to coaches (Corbett, 2013), Polynesian student-athletes' may struggle to uphold their cultural values outside of their sociocultural environment. Thus,



cultural values contribute to subjective norm because "the factors of their [Polynesian's] success relate to how the social and cultural elements of their [Polynesian's] specific ontological agency is handled" (Zakus & Horton, 2009, p. 82) by administrators and organizations in their destination countries. Thus, examining subjective norm through ethnic identity, family obligation, and cultural values, may yield valuable insight regarding Polynesian football student-athletes' motivations.

Perceived behavioral control. Perceived behavioral control refers to the individual's "perception of the ease or difficulty of performing the behavior" (Wiethoff, 2004, p.265). It has two components: (1) how much control a person perceives to have over the given behavior, and (2) how confident the individual feels about their capabilities to complete or not complete the behavior (Manning, 2009). Perceived behavioral control is determined by an individual's salient control beliefs about the presence of factors that may hinder or facilitate performance of behavior (Armitage & Conner, 2001). These can include internal factors such as past experience, second-hand information, and acquired skills; or situational factors such as opportunities, accessibility of resources or dependence on others (Ajzen, 1991; Conner & Sparks, 2005). Further, perceived behavioral control is the only factor theorized to directly influence both behavior and intention within the TPB (Ajzen, 1991).

Therefore, the purpose of the present study was to use the TPB to explore different elements which motivate Polynesian football student-athletes toward achieving a higher GPA. Specifically, it was hypothesized: (1) Ethnic identity, family obligation and cultural values would be significant contributors to subjective norm, (2) there would be a positive relationship between attitude, subjective norm, and perceived behavioral control, and each motivation type (academic,

athletic, and career), (3) each motivation type (academic, athletic, and career) would predict GPA, and (4) perceived behavioral control would predict GPA.

#### Methods

#### Sample

Respondents (N = 70) consisted of football student-athletes at 10 D1 U.S. universities who self-identified as Polynesian. Aged 18 to 27 (M = 20.87, SD = 2.12), the majority of the study's participants were freshman (38%), followed by juniors (25%), sophomores (20%), seniors (12%), and fifth-year seniors (5%). Most individuals' were Samoan (37%), and Tongan (37%), with multiracial Polynesians (15%) being the next closest ethnic group, and lastly Hawaiian (12%). Student-athletes' were primarily from Hawaii, (n = 20) California (n = 15) and Utah (n = 12). The remainder of the sample were from other U.S. states or islands of the South Pacific, including Tonga and American Samoa. Socioeconomic status was reported as lower class (18%), lower-middle class (42%), middle-class (30%), and upper-middle class (10%), and high school graduate was the highest level of education which most respondents' mothers (37%) and fathers (29%) attained. Finally, two university programs participated on the condition that their student-athletes would self-report their GPA (n = 10).

#### **Data Collection Procedures**

Polynesian football student-athletes were recruited to participate upon approval of each university's athletic academic director or football academic advisor (they will now be referred to as the liaison). An email containing a brief summary of the study and a direct link to the online Qualtrics survey was sent to each liaison to forward on to participants. Specific instructions were given to each liaison on how to collect the data.



The intent to keep data collection consistent across university sites was achieved by administering the questionnaire online. In the course of data collection however, it became necessary to also use paper and pen questionnaires. The difference between online and paper and pen questionnaires has been found to be not a significant factor in data collection (Ward, Clark, Zabriskie, & Morris, 2012). For this study, when comparing the means of the paper and pen versus online data collection, the average *t-test* statistic was .912, indicating there was not a difference for online or paper and pen data collection methods. Hence, paper questionnaires were mailed to liaisons' of participating schools who requested them, and administered on the researchers' behalf. The researcher then traveled to those schools to collect completed questionnaires' and participants GPA. Cumulative GPA's were obtained from each liaison at the beginning of winter 2014 semester, and each respondent's questionnaire and GPA were matched. Self-reported GPA's were already matched to its questionnaire.

#### Instrumentation

Attitude, subjective norm, perceived behavioral control, and intention were measured in this study (see Table 1). Participants responded using on a 7-point Likert scale, unless otherwise stipulated.

**Attitude.** Attitude towards "Achieving a higher GPA this semester" was measured using five items with the anchors *unenjoyable/enjoyable*, *useless/beneficial*, *bad/good*, *unpleasant/pleasant*, and *undesirable/desirable* ( $\alpha = .85$ ). The question and anchors were based on guidelines suggested by Ajzen (2002) and Davis et al., (2002).

**Subjective norm.** A key component of this study was to examine the sociocultural elements which may contribute to subjective norm. The following instruments were used to examine ethnic identity, family obligation and cultural values (see Table 1).



Revised Multigroup Ethnic Identity Measure (MEIM). Ethnic identity was measured using Roberts et al. (1999) Revised MEIM. Reporting their feelings toward their ethnicity or ethnic group, participants responded to 12 questions anchored strongly disagree/strongly agree ( $\alpha = .93$ ). A sample item was "I have a lot of pride in my ethnic group".

Respect for Family and Future Support Scale. Family obligation was measured using Fuligni and Pedersen's (2002) Respect for Family and Future Support scale. Seven items measured respect for family ( $\alpha$  =.89). A sample item was "How important is it for you to do well for the sake of your family?" Six items measured future support ( $\alpha$  = 73), and a sample item was "How important is it for you to help take care of your brothers and sisters in the future?" Scores were calculated and summed together to create an overall family obligation score ( $\alpha$  = .85).

Cultural Value Orientation Scale. Cultural values were measured using the collectivism sub-scale from the Cultural Value Orientations Scale (Gaines et al., 1997). This scale was considered as Polynesians have been found to employ high collectivistic values (Podsiadlowski & Fox, 2011). Participants responded to 10 questions anchored *strongly disagree/strongly* agree. A sample item was "I have an obligation to give back to my community" ( $\alpha = .91$ ).

**Perceived behavioral control.** Perceived behavioral control items asked participants to answer four questions regarding their perceived behavioral control over "Achieving a higher GPA this semester". The first and second questions were anchored by the terms *strongly disagree/strongly agree*. The third question was anchored by *impossible/possible*, and the fourth question by *no control/complete control* ( $\alpha = .82$ ).

**Intention.** The Student Athletes Motivation toward Sports and Academics Questionnaire (SAMSAQ; Gaston, 2002) was used to measure academic, athletic, and career motivation. Participants responded to 30 items on a 6-point Likert scale, 1 (very strongly disagree) to 6 (very



Table 1). With the ethnic population this study focused on, English may not have been a respondent's first language, and therefore all four reverse coded items were deleted. The fifth item was deleted from the original scale. As a result, the academic motivation subscale consisted of 13 items ( $\alpha$  = .85), the athletic motivation subscale consisted of seven items ( $\alpha$  = .88), and the career motivation subscale consisted of five items ( $\alpha$  = .79). A sample item which measured academic motivation was "I am confident that I can achieve a high grade point average this year (3.0)". An example of an item which measured athletic motivation was "Achieving a high level of performance in my sport is an important goal for me this year". Finally, "I chose to play sport because it is something that I am interested in as a career" is a sample item which measured career motivation. An overall student-athlete motivation score was determined by summing the respondent's motivation scores ( $\alpha$  = .72).

#### **Data Analysis**

Data were analyzed using the Statistical Package for Social Sciences (SPSS) Version 22.0 computer software. Data were first cleaned and screened looking for improbable outliers. Correlations between all the variables in the study were then considered. Next, reliability of each variable was examined. A regression was then conducted for subjective norms using ethnic identity, family obligation and cultural values to determine the contribution of each variable.

**Regression analyses.** Four models were analyzed using stepwise regression. Each model used the dependent variables: overall student-athlete motivation, academic motivation, athletic motivation and career motivation respectively. Attitude (ATT), subjective norm (SN), and perceived behavioral control (PBC) were used as the independent variables in each model.

#### Results

Central tendency and descriptive statistical analyses of each dependent variable in this study were reported (see Table 2). Also, given the small sample size, demographic variables were used to describe the study's sample and not included in the regression analyses.

Substantive quantitative results were reported for each hypothesis.

#### **Hypothesis 1**

Family obligation ( $\beta$  = .41, t = 3.08, SE = .05) and cultural values ( $\beta$  = .25, t = 1.86, SE = .06) were significant predictors of SN as hypothesized. Ethnic identity, however, was not a significant contributor to SN. The new SN variable was created by summing family obligation and cultural values ( $\alpha$  = .81).

#### **Hypothesis 2**

A significant and positive correlation was found between SN and each motivation variable (academic, athletic, and career motivation), and PBC with each motivation variable, as was hypothesized (see Table 3). Correlations between ATT and each of the motivation variables were inconsistent. For example, significant positive correlations were found between attitude and overall student-athlete motivation (r = .36, p < .01) and academic motivation (r = .48, p < .01) but not for athletic and career motivation.

#### Hypotheses 3 and 4

While GPA was not predicted in the present study, each motivation type was, and therefore findings provided partial support for Ajzen's (1991) TPB. When ATT, SN, and PBC were regressed on each type of motivation (overall, academic, athletic, and career), SN was a significant predictor of each motivation type (see Table 4). Also, ATT contributed to academic motivation, and PBC predicted athletic and overall motivation.



#### **Discussion**

The primary purpose of this study was to assess the contribution of ethnic identity, family obligation and cultural values to subjective norm. The secondary purpose was to add support for Ajzen's (1991) TPB as model to predict AP. Three key findings were found in the present study which provided partial support for the TPB (Ajzen, 1991). First, findings indicated family obligation and cultural values were strong positive contributors to subjective norm. Second, subjective norm predicted each motivation type (academic, athletic, and career), whereas attitude predicted academic motivation only, and perceived behavioral control predicted athletic motivation. Lastly, GPA was not predicted by motivation or perceived behavioral control.

#### **Contributors to Subjective Norm**

As hypothesized, family obligation and cultural values contributed to subjective norm for Polynesian football student-athletes. This suggests the pressure to provide support for family and uphold cultural values is an area of consideration when motivating Polynesian student-athletes. For Polynesians, family obligation and cultural values overlap. Consistent with research, God, family, respect and love are inherent values which permeate through the Polynesian culture (Franks, 2009; Tengan & Markham, 2009; Zakus & Horton, 2009). While these may parallel with the general societal values of many, these values provide Polynesians foundational grounding in every aspect of their life (Morita, 2013). Specifically, Polynesians are taught to show respect toward parents, elders and other authoritative figures, and show love and give to everyone (Morita, 2013). Part of showing respect is not speaking out of turn, and not questioning your parents, elders or figures of authority (e.g. football coach). These values bode well in a team sport environment like college football, and not surprisingly, attract coaches to recruit players of Polynesian descent (Corbett, 2013).



Ethnic identity did not contribute to subjective norms as was hypothesized. Most student-athletes in this study were born and raised in the United States. Thus, one reason for ethnic identity not contributing to subjective norm may be associated with acculturation or assimilation factors; where one adopts cultural traits or social patterns from another culture (Miller, Yang, Hui, Choi & Lim, 2011). Outside the home and family environment, there are influences, ideas, and people who may impact a Polynesian's ethnic identity. Further, depending on how many generations a student-athlete's family has resided on mainland USA, an individual may not fully identify with their ethnic group outside the family and home environment.

Attending college may be the first opportunity individuals experience living outside the comforts of their home environment and away from family influence. The American academic institution is a unique environment wherein ethnic minorities' values may be challenged and, therefore, impact their ethnic identity. This new sociocultural environment may be a perfect breeding ground for developing a strong football student-athlete identity. The struggle Polynesian football student-athletes may face is knowing how to develop their identity as a Polynesian and a football student-athlete. Thus, Polynesian football student-athlete's may begin to shape their identity according to their new school and team environment due to the camaraderie they experience within a college football environment (Phinney & Ong, 2007).

#### **Predictors of Intention/Motivation**

Attitude, subjective norm and perceived behavioral control were examined as predictors of student-athlete motivation. Together these factors shape an individual's intention to engage in a specific behavior (Ajzen, 1991). While subjective norms was a consistent contributor to each type of motivation for the study's sample, perceived behavioral control was the strongest predictor to athletic motivation, and attitude was the greatest predictor of academic motivation.



**Subjective norm.** Consisting of family obligation and cultural values, subjective norms showed consistent positive relationships to academic, athletic, and career motivation. This finding highlights the vast impact of subjective norm on Polynesian football student-athletes motivations. These findings are consistent with previous ethnic minority research regarding perception of family pressure to perform and represent their family and community respectively (Fuligni, 2001). This social pressure can either facilitate or hinder the holistic development of Polynesian football student-athletes when met with opportunities to provide a better future for themselves, their family and community. One such opportunity desired by many young male football athletes, is to play in the National Football League (NFL).

The monetary gains for playing professionally in the NFL provide Polynesians an opportunity to give back to their family and community and make their parents proud of them (Zakus & Horton, 2009). However, the pathway to the NFL typically goes through college. Hence, it is imperative student-athletes perform at an acceptable level in the college classroom. Maintaining good academic standing leads to athletic eligibility, which results in visibility time for players to impress NFL scouts on the football field. As long as players are given playing time, hopes and dreams of being drafted by a professional NFL team remain alive. Hence, the ripple effect of maintaining good academic standing is significant for Polynesian football student-athletes, their family, and community. Further, successes or failures experienced in the classroom, or on the field, may reflect the Polynesian individual's family, and community. In other words, if one succeeds, their family and community succeed. So too with failure, and it is this pressure which impact Polynesian football student-athletes' motivations.

**Perceived behavior control**. The strong predictive power of perceived behavioral control to athletic motivation, suggest Polynesian football student-athletes are aware of their



talents and physical athletic inclination. Further, they believe they can be successful with the resources and support provided for them. This finding is indicative of the confidence Polynesian football student-athletes possess in their athletic abilities and therefore are motivated athletically. However, this same perceived behavioral control does not contribute to their academic or career motivation. It is interesting that Polynesian football student-athletes have this perspective on their perceived behavioral control over their academic abilities, for example, as universities typically provide an academic support infrastructure to help students succeed academically.

Student-athletes have access to facilities, tutors, advisors and other resources designed to help them excel as students, as well as prepare for life after college career. Given this support system, Polynesian football student-athletes may be unsure how to use the tools, resources and support effectively. Additionally, findings suggest Polynesian football student-athletes may be unable to overcome their perceived behavioral control even with access to so many resources, and, therefore, lack confidence in this infrastructure designed to help them achieve academically. Study halls, for example, are organized for student-athletes to attend to complete their school work. A Polynesian football student-athlete may perceive their ability to achieve a higher GPA is not possible, even if they attend study hall. As a result, they may overlook the opportunity to meet with a tutor for help with a specific assignment due to their struggle to overcome their perceived behavioral control of improving AP, and this impacts their academic motivation.

Attitude. The strong predictive power of attitude to academic motivation indicates

Polynesian football student-athletes' positive feelings and beliefs towards improving AP. These
feelings are influenced by the individuals' attitude toward the benefits of achieving a higher GPA
each semester. Thus, Polynesian football student-athletes believe achieving a higher GPA each
semester is good, beneficial and useful, and these beliefs impact their academic motivation. The



fact Polynesian football student-athletes realize the impact of achieving academically means they are cognitively processing the positives and negatives of performing academically and not just athletically. The next step is to translate this mental processing into achieved behavior.

#### **Predictors of Academic Performance**

Attitude was also the only variable correlated to GPA, but did not predict GPA. The inability of the present study to predict GPA supports the calls for studies to assess predictors of college student-athletes AP, particularly for ethnic minority groups (Gaston-Gayles, 2004). A reason AP may not have been predicted using the TPB is because GPA may not be the best measurement of AP for Polynesians. Using a cognitive variable such as GPA to measure AP tends to undermine and underestimate the academic capabilities of ethnic minority (Walton & Spencer, 2009). Thus, the pragmatic use of the TPB (Ajzen, 1991) offered insight regarding Polynesian football student-athletes' intention toward improving AP, more so than predicting AP.

#### Limitations

It is important to consider the limitations of this study before moving forward. First, the small sample size impacted the study's inability to predict GPA. The rigorous IRB process at several universities made it difficult to (1) conduct the present study at various schools, and (2) request student's academic information. Consequently, self-reported GPA was collected from a small group of players. Second, data were collected from D1 football student-athletes only. This limited generalizability to all Polynesian college student-athletes, regardless of division level, gender or sport. Lastly, freshmen were the most represented class in the sample, thus the use of GPA after only one semester may not accurately reflect AP. Regardless, findings provided practical implications for all who advise or coach Polynesian football student-athletes.



#### **Implications**

The results of this study indicate Polynesian football student-athletes' motivations do not necessarily translate into behavior. In this study, achieving a higher GPA was the behavior examined. Having good academic standing is critical to Polynesian football student-athletes athletic eligibility, thus examining other behaviors such as hours spent in class, study hall or with advisors may be better measurements of AP rather than GPA and therefore help translate motivation into behavior. Also, the hierarchal structure Polynesians are raised in may provide a blueprint for effective advising methods for advisors. Using the hierarchal structure an educational culture and welfare program could be developed to aid the holistic development of Polynesian football student-athletes'.

Polynesians are raised to respect the counsel parents, elders and other authoritative figures give and therefore respond better to a solution focused approach involving the collective group, such as the Talanoa approach (Gordon, Sauni, & Tuagalu, 2013). Talanoa means "talking...and interacting without a rigid framework' (Vaioleti, 2006, p. 23). This approach is commonly supported by Polynesians as it aligns with processes carried out within their family, communities and church settings, and is a safe environment which promotes participation, inclusion and respect (Gordon et al., 2013; Vaioleti, 2006).

Fostering a safe and secure environment for Polynesian football student-athletes to communicate their needs or struggles with advisors whether on or off the field would enable advisors to build trust. Building a relationship of trust is essential to effectively navigating Polynesian football student-athletes through their college careers. As a relationship cultivates, advisors should emphasize the impact one's schooling will have for their family, community, and future generations aspiring to follow suit. This relationship may encourage student-athletes



to be open in their communication with their parents and other close affiliates (e.g. extended family members, teammates) about school and not just football. By understanding the cultural nuances which facilitate open communication with Polynesian football student-athletes, advisors of any ethnic grouping may be more effective in meeting the needs of Polynesians rather than assuming their needs are being met.

Using the hierarchal structure, an educational culture and welfare program could be designed to connect Polynesian football student-athletes to local Polynesian elders or other authoritative figures. These figures may include (but not limited to) Polynesian student-athlete alumni, religious leaders, and/or respected professionals. Leaders could discuss educational and career paths, cultural traditions, and advise how Polynesian football student-athletes can effectively support the welfare of their family and community as student-athletes. This program may help Polynesian football student-athletes appreciate their college experience and take advantage of all the resources, support and facilities provided for them to succeed. It may also aid one's identity development as a Polynesian and a football student-athlete, enabling him to confidently handle the perceived family pressure to achieve academically and athletically, and successfully transition to a respectable career after college.

#### **Recommendations for Future Research**

As the number of Polynesians entering college as student-athletes continues to increase, the need for research on their motivations and AP is essential. However, translating motivation into behavior is where this study fell short. Therefore, other academic behaviors (e.g. study hall hours, time spent with tutors etc.) should be examined to determine effective measures of AP. Further, a qualitative piece could add context to the different aspects which influence AP for this population. This study also demonstrated the need to continue to tease out ethnic minority



groups. This will assist scholars and advisors to identify specific motivational needs to target of each ethnic group. A final recommendation would be to conduct this study with high school student-athletes as the transition from high school to college may be better served.

#### Conclusion

As one of the first studies to focus specifically on Polynesian football student-athletes, this study contributes to research on the sociocultural context of motivation and AP. By examining specific factors which predict the motives of Polynesian student-athletes, advisors and researchers can more effectively assist Polynesian football players realize their potential to fill both roles as a student and an athlete. The direct implications of effective advising would see improved holistic development of Polynesian football student-athletes. The indirect implications would provide Polynesian football student-athletes the chance to give back to their family and community by continuing to build upon the legacy left by previous generations and ensure future generations gain even more opportunities and access to college football scholarships. Thus, investment in precisely targeted, culturally based advising methods for Polynesian football student-athletes could pay dividends for this demographic. By acknowledging the cultural underpinnings of Polynesians motivations, advisors can better assist Polynesian football student-athletes optimize their college experience as a solid training ground for life.



#### References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Ajzen, I. (2001). Nature and operation of attitudes. Annual Review of Psychology, 52(1), 27-58.
- Ajzen, I. (2002). Constructing a theory of planned behavior questionnaire: Conceptual and methodological considerations. Retrieved May 3, 2012, from http://www.uni-bielefeld.de/ikg/zick/ajzen%20construction%20a%20tpb%20questionnaire.pdf.
- Ajzen, I., & Driver, B. L. (1991). Prediction of leisure participation from behavioral, normative, and control beliefs: An application of the theory of planned behavior. *Leisure Sciences*, 13(3), 185-204.
- Ajzen, I., & Driver, B. L. (1992). Application of the theory of planned behavior to leisure choice. *Journal of Leisure Research*, 50(2), 179-211.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behavior: A metaanalytic review. *British Journal of Social Psychology*, 40(4), 471-499.
- Benbow, C. P., & Stanley, J. C. (1980). Sex differences in mathematical ability: Fact or artifact? *Science*, 210, 1262-1264.
- Bimper, A. Y., Harrison, L., & Clark, L. (2013). Diamonds in the rough: Examining a case of successful Black male student athletes in college sport. *Journal of Black Psychology*, 39(2), 107-130.
- Comeaux, E., & Harrison, C. K. (2011). A conceptual model of academic success for studentathletes. *Educational Researcher*, 40(5), 235-245.
- Conner, M., & Armitage, C. J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology*, 28(15), 1429-1464.



- Conner, M., & Sparks, P. (2005). Theory of Planned Behavior and Health Behavior. In M.

  Conner & P. Sparks (Eds.), *Predicting Health Behavior* (pp. 170-222). New York: Open University Press.
- Corbett, J. (2013, February 3). Polynesian players bring passion, power. *USA Today*. Retrieved from http://www.usatoday.com/story/sports/nfl/2013/02/03/polynesian-super-bowl/1882001/
- Davis, L. E., Ajzen, I., Saunders, J., & Williams, T. (2002). The decision of African American students to complete high school: An application of the theory of planned behavior. *Journal of Education Psychology*, 94(4), 810-819.
- Dekker, S., & Fischer, R. (2008). Cultural differences in academic motivation goals: A metaanalysis across 13 societies. *The Journal of Educational Research*, 102(2), 99-110,
- Dennis, J. M., Phinney, J. S., & Chuateco, L. I. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development*, 46(3), 223-236.
- Dilley-Knoles, J., Burnett, J. S., & Peak, K. W. (2010). Making the grade: Academic success in today's athlete. *The Sport Journal*, *13*(1). Retrieved from http://www.thesportjournal.org/article/making-grade-academic-success-today-s-athlete
- Franks, J. S. (2009). Pacific Islanders and American football: Hula honeys, throwin' Samoans and the rock. *International Journal of the History of Sport*, 26(16), 2397-2411.
- Fuligni, A. J. (2001). Family obligation and the academic motivation of adolescents from Asian,

  Latin American and European backgrounds. *New Directions for Child and Adolescent*Development, 2001(94), 61-76.



- Fuligni, A. J., & Pedersen, S. (2002). Family obligation and the transition to young adulthood.

  \*Developmental Psychology, 38(5), 856-868.
- Fuligni, A. J., Tseng, V., & Lam, M. (1999). Attitudes towards family obligations among American adolescents with Asian, Latin American, and European backgrounds. *Child Development*, 70(4), 1030-1044.
- Gaines, S. O., Marelich, W. D., Bledsoe, K. L., Steers, W. N., Henderson, M. C., Granrose, C. S.,...Page, M. S. (1997). Links between race/ethnicity and cultural values as mediated by racial /ethnic identity and moderated by gender. *Journal of Personality and Social Psychology*, 72(6), 1460-1476.
- Gaston, J. L. (2002). A study of student athletes' motivation toward sports and academics.

  (Doctoral Dissertation). Ohio State University, Columbus, OH.
- Gaston-Gayles, J. L. (2004). Examining academic and athletic motivation among student athletes at a division I university. *Journal of College Student Development*, 45(1), 75-83.
- Gaston-Gayles, J. L. (2005). The factor structure and reliability of the student athletes' motivation toward sports and academics questionnaire (SAMSAQ). *Journal of College Student Development*, 46(3), 317-327.
- Gordon, B., Sauni, P., & Tuagalu, C. (2013). Sport means 'family and church': Sport in New Zealand Pasifika communities. *Asia-Pacific Journal of Health, Sport and Physical Education*, *4*(1), 49-63.
- Hyatt, R. (2003). Barriers to persistence among African American intercollegiate athletes: A literature review of non-cognitive variables. *College Student Journal*, *37*(2), 260-275.
- Irick, E. (2011, September 15). NCAA race and gender demographics, 1995-2011 [United States] [Computer File]. *ncaa.org*.



- Kalavite, T. (2010). Fononga'A fakahalafononga: Tongan students' journey to academic achievement in New Zealand tertiary education. (Doctoral Dissertation). University of Waikato, Hamilton, New Zealand.
- Kawaguchi, S. (2003). Ethnic identity development and collegiate experience of Asian pacific American students: Implications for practice. *NASPA Journal*, *40*(3), 13-29.
- Kearney, J., & Donaghy, M. (2010). Bridges and barriers to success for Pacific Islanders completing their first year at an Australian university. First Year Experience in Higher Education. Queensland University of Technology: QUT Publishing.
- Lipnevich, A. A., MacCann, C., Krumm, S., Burrus, J., & Roberts, R. D. (2011). Mathematics attitudes and mathematics outcomes of U.S. and Belarusian middle school students. *Journal of Educational Psychology*, 103(1), 105-118.
- Logel, C. R., Walton, G. M., Spencer, S. J., Peach, J., & Mark, Z. P. (2012). Unleashing latent ability: Implications of stereotype threat for college admissions. *Educational Psychologist*, 47(1), 42-50.
- Manning, M. (2009). The effects of subjective norms on behavior in the theory of planned behavior: A meta-analysis. *The British Psychological Society*, 48, 649-705.
- Mayeda, D. T., & Okamoto, S. K. (2002). Challenging the "Asian Pacific American" rubric: Social constructions of ethnic identity among Samoan youth in Hawaii. *Journal of Poverty*, 6(4), 43-62.
- Miller, M. J., Yang, M., Hui, K., Choi, N. Y., & Lim, R. H. (2011). Acculturation, enculturation, and Asian American college students' mental health and attitudes toward seeking professional psychological help. *Journal of counseling psychology*, *58*(3), 346.



- Milton, P. R., & Gottschalk, R. (2010). Differences in academic success between male and female student-athletes: An exploratory study. *International Journal of Sport Management*, 11(4), 602-608.
- Morita, M. K. (2013). A Study of Pacific Islander Scholarship Football Players and Their Institutional Experience in Higher Education (Doctoral dissertation). University of Southern California, Los Angeles, CA.
- NCAA. (2012, August 1). Academic philosophy. *ncaa.org*. Retrieved March 3, 2013, from http://www.ncaa.org/wps/wcm/connect/public/NCAA/Academics/Division+I/.
- Nguyen, H. D., & Ryan, A. M. (2008). Does stereotype threat affect test performance of minorities and women? A meta-analysis of experimental evidence. *Journal of Applied Psychology*, 93(6), 1314-1334.
- Noguera, P. A. (2003). The trouble with Black boys: The role and influence of environmental and cultural factors on the academic performance of African American males. *Urban Education*, 38(4), 431-459.
- Ogbu, J. U. (1984). *Understanding community forces affecting minority students' academic effort*. Unpublished manuscript prepared for The Achievement Council of California, Oakland.
- Ogbu, J. U. (1987). Variability in minority school performance: A problem in search of an explanation. *Anthropology & Education Quarterly*, 18(4), 312-334.
- Otunuku, M., & Brown, G. T. (2007). Tongan students' attitudes towards their subjects in New Zealand relative to their academic achievement. *Asia Pacific Education Review*, 8(1), 117-128.



- Pang, V. O., Han, P. P., & Pang, J. M. (2011). Asian American and Pacific Islander students: equity and the achievement gap. *Educational Researcher*, 40(8), 378-389.
- Perreira, K. M., Fuligni, A., & Potochnick, S. (2010). Fitting in: The roles of social acceptance and discrimination in shaping the academic motivations of Latino youth in the U.S. southeast. *Journal of Social Issues*, 66(1), 131-153.
- Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research.

  \*Psychological Bulletin, 108(3), 499-514.
- Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity:

  Current status and future directions. *Journal of Counseling Psychology*, *54*(3), 271-281.
- Podsiadlowski, A., & Fox, S. (2011). Collectivist value orientations among four ethnic groups:

  Collectivism in the New Zealand context. *New Zealand Journal of Psychology*, 40(1), 5-18.
- Reynolds, L., Fisher, D., & Cavil, J. K. (2012). Impact of demographic variables on African-American student athletes' academic performance. *Educational Foundations*, 26(3), 93-111.
- Richardson, M., & Abraham, C. (2013). Modeling antecedents of university students' study behavior and grade point average. *Journal of Applied Social Psychology*, 43, 626-637.
- Roberts, R. E., Phinney, J. S., Masse, L. C., Chen, Y. R., Roberts C. R., & Romero, A. (1999).

  The structure of ethnic identity of young adolescents from diverse ethnocultural groups.

  The Journal of Early Adolescence, 19(3), 301-322.
- Saltiban, B. O. (2012). Storying academic spaces: Reflections, narratives, and interpretations of Tongan students' educational experiences. (Doctoral Dissertation). University of Utah, Salt Lake City, UT.



- Sedlacek, W. E. (1999). Black students on White campuses: 20 years of research. *Journal of College Student Development*, 40(5), 538-550.
- Sedlacek, W. E., & Adams-Gaston, J. (1992). Predicting the academic success of student-athletes using SAT and non-cognitive variables. *Journal of Counseling and Development*, 70(6), 724-727.
- Sellers, R. M. (1992). Racial differences in the predictors of academic achievement of studentathletes of Division I revenue-producing sports. *Sociology of Sport Journal*, 1, 46-51.
- Shen, B., McCaughtry, N., & Martin, J. (2008). Urban adolescents' exercise intentions and behaviors: An exploratory study of a trans-contextual model. *Contemporary Educational Psychology*, 33, 841-858.
- Shuman, M. P. (2009). Academic, athletic, and career athletic motivation as predictors of academic performance in student athletes at a Division I university. (Doctoral Dissertation). University of North Carolina, Greensboro, NC.
- Simons, H. S., Van Rheenen, D., & Covington, M. V. (1999). Academic motivation and the student-athlete. *Journal of College Student Development*, 40, 151-161.
- Simons, H., & Van Rheenen, D. (2000). Noncognitive predictors of student-athletes' academic performance. *Journal of College Reading and Learning*, *30*, 167-193.
- Snyder, P. L. (1996). Comparative levels of expressed academic motivation among Anglo and African American university student-athletes. *Journal of Black Studies*, *26*(6), 651-667.
- Steinfeldt, J. A., Reed, C., & Steinfeldt, M. C. (2010). Racial and athletic identity of African American football players at historically Black colleges and universities and predominantly White institutions. *Journal of Black Psychology*, *36*(1), 3-24.



- Tengan, T. P., & Markham, J. M. (2009). Performing Polynesian masculinities in American football: From 'rainbows to warriors'. *The International Journal of the History of Sport,* 26(16), 2412-2431.
- Tracey, T. J., & Sedlacek, W. E. (1985). The relationship of noncognitive variables to academic success: A longitudinal comparison by race. *Journal of College Student Personnel, 26,* 405-410.
- Tseng, V. (2004). Family interdependence and academic adjustment in college: Youth from immigrant and US-born families. *Child Development*, 75(3), 966-983.
- Vaioleti, T. M. (2006). Talanoa research methodology: A developing position on pacific research. *Waikato Journal of Education*, *12*, 21-34.
- Walton, G. M., & Spencer, S. J. (2009). Latent ability: Grades and test scores systematically underestimate the intellectual ability of negatively stereotyped students. *Psychological Science*, 20, 1132-1139.
- Ward, P., Clark, T., Zabriskie, R., & Morris, T. (2012). Paper/pencil versus online data collection: An exploratory study. *Journal of Leisure Research*, 44(4), 507-530.
- Wiethoff, C. (2004). Motivation to learn and diversity training: Application of the Theory of Planned Behavior. *Human Resource Development Quarterly*, *15*(3), 263-278.
- Woodruff, A. L., & Schallert, D. L. (2008). Studying to play, playing to study: Nine college student-athletes' motivational sense of self. *Contemporary Educational Psychology*, 33(2008), 34-57.
- Zakus, D., & Horton, P. (2009). Pasifika in Australian rugby: Emanant cultural, social and economic issues. *Sporting Traditions*, *26*(2), 67-86.



#### **Tables**

#### Table 1

# Study's Instrument Items

# Theory of Planned Behavior (Ajzen, 1991)

## Attitude ( $\alpha = .85$ )

- 1. "Achieving a higher GPA this semester is..." Unenjoyable/enjoyable
- 2. "Achieving a higher GPA this semester is..." Useless/Useful
- 3. "Achieving a higher GPA this semester is..." Bad/Good
- 4. "Achieving a higher GPA this semester is..." Unpleasant/pleasant
- 5. "Achieving a higher GPA this semester is..." Undesirable/desirable

# Perceived Behavioral Control ( $\alpha = .82$ )

- 1. If I want to, I can achieve a higher GPA this semester
- 2. It is mostly up to me whether I achieve a higher GPA this semester
- 3. For me, achieving a higher GPA this semester would be "impossible/possible"
- 4. How much control do you believe you have over achieving higher GPA this semester

# Student Athletes' Motivation toward Sports and Academics Questionnaire (Gaston-Gayles, 2002)

# Academic Motivation ( $\alpha = .85$ )

- 1. I am confident that I can achieve a high GPA this year (3.0 or above)
- 2. It is important for me to learn what is taught in my courses
- 3. I am willing to put in the time to earn excellent grades in my courses
- 4. The most important reason why I am in school is to play my sport (reversed)\*
- 5. The amount of work required in my courses interferes with my athletic goals
- 6. I will be able to use what is taught in my courses in different aspects of my life outside of school
- 7. I chose (or will choose) my major because it is something I am interested in as a career
- 8. Earning a high GPA (3.0 or above) is <u>not</u> an important goal for me this year\*
- 9. I get more satisfaction from earning an "A" in a course toward my major than winning a game in my sport



- 10. During the years I compete in my sport, completing a college degree is not a goal for me\*
- 11. I have some doubt about my ability to earn high grades in some of my courses
- 12. I am confident that I can earn a college degree
- 13. I get more satisfaction from winning a game in my sport than from getting an "A" in a course toward my major (reversed)\*
- 14. It is not important for me to perform better than other students in my academic courses
- 15. The content of most of my courses is interesting to me
- 16. The most important reason why I am in school is to earn a degree
- 17. It is not worth the effort to earn excellent grades in my courses

## Athletic Motivation ( $\alpha = .88$ )

- 1. Achieving a high level of performance in my sport is an important goal for me this year
- 2. It is important to me to learn the skills and strategies taught by my coaches
- 3. It is important for me to do better than other athletes in my sport
- 4. The time I spend engaged in my sport is enjoyable to me
- 5. It is worth the effort to be an exceptional athlete in my sport
- 6. Participation in my sport interferes with my progress toward earing a college degree\*
- 7. I get more satisfaction from winning a game in my sport than from getting an "A" in a course toward my major
- 8. I am willing to put in the time to be outstanding in my sport

## Career Motivation ( $\alpha = .79$ )

- 1. I chose to play my sport because it is something that I am interested in as a career
- 2. I have some doubt about my ability to be a star athlete on my team
- 3. I am confident that I can be a star performer on my team this year
- 4. My goal is to make it to the professional level or the Olympics in my sport
- 5. I am confident that I can make it to the elite level in my sport (Professional/Olympic)

## Revised Multigroup Ethnic Identity (Roberts et al., 1999)

#### Subjective Norm – Ethnic Identity ( $\alpha = .93$ )

1. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs



- 2. I am active in organizations or social groups that include mostly members of my own ethnic group
- 3. I have a clear sense of my ethnic background and what it means for me
- 4. I think a lot about how my life will be affected by my ethnic group membership
- 5. I am happy that I am a member of the group I belong to
- 6. I have a strong sense of belonging to my own ethnic group
- 7. I understand pretty well what my ethnic group membership means to me
- 8. I have often talked to other people in order to learn more about my own ethnic group
- 9. I have a lot of pride in my ethnic group
- I participate in cultural practices of my own group, such as special food, music, or customs
- 11. I feel good about my cultural or ethnic background
- 12. I have a clear sense of my ethnic background & what it means for me

# Respect for Family (Phinney & Pedersen, 2002)

# Subjective Norm – Family Obligation ( $\alpha = .89$ )

- 1. Treat your parents with great respect
- 2. Follow your parents' advice about choosing friends
- 3. Do well for the sake of your family
- 4. Follow your parents' advice about choosing a job or major in college
- 5. Treat your grandparents with great respect
- 6. Respect your older brothers and sisters
- 7. Make sacrifices for your family

## Future Support (Phinney & Pedersen, 2002)

# Subjective Norm – Family Obligation ( $\alpha = .73$ )

- 1. Help your parents financially
- 2. Live at home with your parents until you are married
- 3. Help take care of your brothers and sisters
- 4. Spend time with your parents even after you no longer live with them
- 5. Live near your parents
- 6. Have your parents live with you when they get older



# Cultural Value Orientation Scale (Gaines et al., 1997)

Subjective Norm – Cultural Values ( $\alpha = .91$ )

- 1. I don't feel that I'm a success unless I've helped others succeed as well
- 2. I want the opportunity to give back to my community
- 3. I'm the type of person who lends a helping hand whenever possible
- 4. I consider myself a team player
- 5. My major mission in life is striving for social justice for all
- 6. My heart reaches out to those who are less fortunate than myself
- 7. If another person can learn from my mistakes, I'm willing to share my ups and downs with that person so that he/she can do better
- 8. It feels great to know that others can count on me
- 9. I have an important role to play in bringing together the peoples of the world
- 10. I believe in the motto, "United We Stand, Divided We Fall."

*Note.* An \* denotes items were deleted in final reliability analyses

Table 2

Descriptive Statistics of Dependent Variables

	N	Minimum	Maximum	Mean	σ
GPA	60	1.00	3.87	2.70	.58
Overall Motivation	62	90.00	150.00	120.94	16.91
Academic Motivation	62	35.00	78.00	60.73	9.90
Athletic Motivation	62	27.00	42.00	37.55	4.68
Career Motivation	62	11.00	30.00	22.66	5.35

Table 3

Correlations Among Study Variables

	1	2	3	4	5	6	7	8
1. GPA								
2. Overall Motivation	.079							
3. Academic Motivation	.148	.905**						
4. Athletic Motivation	.092	.732**	.448**					
5. Career Motivation	105	.847**	.618**	.611**				
6. ATT	.329*	.363**	.479**	.131	.149			
7. SN	143	.452**	.368**	.426**	.366**	.132		
8. PBC	090	.525**	.459**	.548**	.331**	.398**	.427**	

Note. ATT – Attitude; SN – Subjective Norm; PBC – Perceived Behavioral Control

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed)

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed)

Table 4
Stepwise Regression Results for the Prediction of each Motivation Type

Variable	Ste	ep/Predictor	$\mathbb{R}^2$	$\Delta R^2$	ΔF	В	SE	ß	Sig.
Overall Motivation	1.	SN	.204	.204	14.139	.520	.138	.452	.000
	2.	SN	.371	.167	7.039	.331	.139	.288	.020
		ATT				.714	.432	.196	.104
		PBC				1.758	.707	.324	.016
Academic Motivation	1.	SN	.136	.136	8.635	.248	.084	.368	.005
	2.	SN	.358	.222	9.149	.153	.082	.228	.067
		ATT				.772	.256	.363	.004
		PBC				.691	.419	.217	.105
Athletic Motivation	1.	SN	.182	.182	12.197	.135	.039	.426	.001
	2.	SN	.353	.171	7.005	.073	.039	.231	.065
		ATT				094	.256	093	.443
		PBC				.731	.419	.487	.001
Career Motivation	1.	SN	.366	.134	8.515	.133	.046	.366	.005
	2.	SN	.415	.038	1.224	.100	.050	.276	.051
		ATT				.038	.157	.033	.810
		PBC				.343	.257	.200	.187

Note: Significant Alpha Level = .10



# Appendix A: Prospectus

Examining Academic Performance of Polynesian Student-Athletes Using the

Theory of Planned Behavior



#### Introduction

Academic performance (AP) is a term that describes how well students perform in their courses (Gaston, 2002; Gaston-Gayles, 2004; 2005). Generally measured by grade point average (GPA), graduation rates, standardized tests and high school scores, AP is used to signify the measurable outcome of one's education. The implications of AP on personal and professional development can be significant (Cole, Matheson, & Anisman, 2007; Ivory, 2002), especially with regard to college student-athletes (NCAA, 2012). Many student-athletes overlook the importance of their academic responsibilities due to their aspirations to have a professional career in their chosen sport (Simons, Van Rheenen, & Covington, 1999). An education, however, can "serve as a more dependable vehicle for a lifetime of career and financial opportunities" (Bimper, Harrison, & Clark, 2013, p. 108). With this knowledge, scholars and administrators have sought ways to foster academic success among student-athletes (Comeaux & Harrison, 2011; Gaston-Gayles, 2004; Reynolds, Fisher, & Cavil, 2012; Simons et al., 1999).

The Theory of Planned Behavior (TPB) (Ajzen, 1991) is one theoretical framework used to examine academic behavior. The TPB suggests behavior is driven by an individual's intention. Three major determinants which influence intention are (1) attitudes toward the behavior, (2) subjective norms (e.g. sociocultural factors), and (3) perceived behavioral control (Ajzen, 1991). Perceived behavioral control can directly influence both intention and behavior (Manning, 2009). Ajzen (1991) states, "intentions are assumed to capture the motivational factors that influence a behavior" (p.181), implying intentions reflect the degree of effort individuals exert toward specific tasks or their level of motivation (Ajzen, 1991). For this reason, intention and motivation will be used synonymously in this study. The TPB has been used as a successful platform to predict academic behavior among high school and university



students, providing a pragmatic framework in examining the academic performance of college student-athletes (Davis, Ajzen, Saunders, & Williams, 2002; Lipnevich, MacCann, Krumm, Burrus, & Roberts, 2011; Richardson & Abraham, 2013).

The expectation of college student-athletes to excel on the field and in the classroom can be an arduous task. They are often asked to serve two masters yielding different motivations (Woodruff & Schallert, 2008). In addition, the prospect of a professional sporting career raises yet another type of motivation to consider in relation to AP (Gaston-Gayles, 2005). As a result, academic motivation, athletic motivation and career motivation have individually and collectively been examined to better understand the unique contribution of each one to AP among college student-athletes (Gaston-Gayles, 2004; 2005; Sellers, 1992; Simons et al., 1999; Woodruff & Schallert, 2008).

Research has consistently shown Polynesians and other ethnic minority students generally do not experience the same level of academic success as their Anglo peers (Gaston, 2002; Kalavite, 2010). Issues related to culture, social relationships and identity have been examined to better understand the disparity and account for the variance in academic performance between Anglo's and minorities (Comeaux & Harrison, 2011; Fuligni, Tseng, & Lam, 1999; Sellers, 1992). Given the TPB's consideration of subjective norms, and the impact it can have on ones' intentions, it would seem appropriate to examine its relevance for a specific cultural group, such as male Polynesian student-athletes.

Polynesians are well-known for their athletic abilities (Corbett, 2013; Tengan & Markham, 2009), but little research has been conducted to examine their AP (Saltiban, 2012). Subjective norm factors such as ethnic identity, family obligation and cultural values have been found to influence motives toward AP of minorities (Fuligni, 2001; Fuligni & Pedersen, 2002;



Mayeda & Okamoto, 2002; Perreira, Fuligni, & Potochnick, 2010). These factors, however, have not been empirically tested with Polynesian student-athletes within the framework of TPB.

#### **Problem Statement**

This study will examine how attitude, subjective norms, and perceived behavioral control influence academic, athletic, and career intention to achieve higher AP among male Polynesian student-athletes participating in Division I college football. Furthermore, subjective norms will be explored through the lens of ethnic identity, family obligation, and cultural values.

## **Purpose of the Study**

The purpose of this study is to provide practical implications for academic advisors of Polynesian student-athletes, to effectively assist these individuals in increasing motivation to achieve higher standards of AP, and thereby improve their future career options outside of sport, as well as their standard of living.

# **Importance of Study**

The National Collegiate Athletic Association (NCAA) is committed to integrating athletics into higher education, and ultimately enable student-athletes every opportunity to graduate (NCAA, 2012). As Polynesians continue to impress college football coaches with their athletic ability, concerns over AP naturally follow suit in regards to the general student-athlete population (Comeaux & Harrison, 2011; Gaston, 2002). By understanding the factors which influence AP among male Polynesian student-athletes who participate in revenue generating sports, such as Division I football, these concerns can be addressed.

The findings of this study will add to the literature by expounding on the knowledge regarding Polynesian student-athletes' motivation and AP from a cultural perspective. While the Polynesian and Asian ethnic groups are generally combined to constitute an aggregate, the



heterogeneity of each ethnic group warrants disaggregation in order to gain a true cultural perspective of the intended population (Mayeda & Okamoto, 2002; CARE, 2010).

Understanding the socio-cultural elements (ethnic identity, family obligation, and cultural values) which may impede or motivate AP among Polynesians, as opposed to solely highlighting the variances between Whites and Polynesians may yield explanations of the relationship between motives and actual AP among Polynesians. Further, examining the different types of motivation as predictors of AP may enable advisors and administrators to be better equipped in aiding Polynesian student-athletes to successfully balance their time and effort between academic and athletic tasks contributing to the individual's holistic development during their college experience.

#### **Delimitations**

The study is delimited to the following:

- 1. All respondents will be on Division I level college football teams.
- 2. All respondents will be Polynesian student-athletes on the current roster from the aforementioned.
- 3. All respondents will be male.
- 4. The use of the (a) Student-Athletes' Motivation toward Sports and Academics

  Questionnaire (SAMSAQ) (Gaston-Gayles, 2005) will measure academic, athletic, and
  career intention, (b) Roberts et al. (1999) Revised (12-item) Multigroup Ethnic Identity

  Measure will measure ethnic identity, (c) Respect for Family and Future Support scales
  (Fuligni & Pedersen, 2002) will measure family obligation, (d) the Cultural Values

  Orientation Scale (Gaines et al., 1997) to measure cultural values, and (e) modified

Theory of Planned Behavior Questionnaire which will measure attitude, perceived behavioral control, and intention (academic, athletic, and career).

5. Data will be collected during Fall 2013 semester.

#### Limitations

The study is limited by the following factors:

- 1. Only NCAA sanctioned Division I level universities in the U.S will be included
- 2. The only sport being considered is football.
- Data will be collected during one semester only, and the chosen semester is in-season for football.
- 4. The sample will not be randomly selected.

# **Hypotheses**

The study will test the following hypotheses:

- H<sub>01</sub>: There is no relationship between attitudes and academic intention.
- H<sub>A1</sub>: There is a positive relationship between attitudes and academic intention.
- H<sub>02</sub>: There is no relationship between attitudes and athletic intention.
- H<sub>A2</sub>: There is a positive relationship between attitudes and athletic intention.
- H<sub>03</sub>: There is no relationship between attitudes and career intention.
- H<sub>A3</sub>: There is a positive relationship between attitudes and career intention.
- H<sub>04</sub>: There is no relationship between attitudes and overall student-athlete intention.
- H<sub>A4</sub>: There is a positive relationship between attitudes and overall student-athlete intention.
- H<sub>05</sub>: There is no relationship between subjective norms and academic intention.
- H<sub>A5</sub>: There is a positive relationship between subjective norms and academic intention.



- H<sub>06</sub>: There is no relationship between subjective norms and athletic intention.
- H<sub>A6</sub>: There is a positive relationship between subjective norms and athletic intention.
- H<sub>07</sub>: There is no relationship between subjective norms and career intention.
- H<sub>A7</sub>: There is a positive relationship between subjective norms and career intention.
- H<sub>08</sub>: There is no relationship between subjective norms and overall student-athlete intention.
- Has: There is a positive relationship between subjective norms and overall student-athlete intention
- H<sub>09</sub>: There is no relationship between perceived behavioral control and academic intention.
- H<sub>A9</sub>: There is a positive relationship between perceived behavioral control and academic intention.
- H<sub>10</sub>: There is no relationship between perceived behavioral control and athletic intention.
- H<sub>A10</sub>: There is a positive relationship between perceived behavioral control and athletic intention.
- H<sub>11</sub>: There is no relationship between perceived behavioral control and career intention.
- H<sub>A11</sub>: There is a positive relationship between perceived behavioral control and career intention.
- H<sub>12</sub>: There is no relationship between perceived behavioral control and overall studentathlete intention.
- H<sub>A12</sub>: There is a positive relationship between perceived behavioral control and overall student-athlete intention.
- H<sub>13</sub>: Academic intention is not a significant predictor of academic performance.



- HA13: Academic intention is a significant predictor of academic performance.
- H<sub>14</sub>: Athletic intention is not a significant predictor of academic performance.
- H<sub>A14</sub>: Athletic intention is a significant predictor of academic performance.
- H<sub>15</sub>: Career intention is not a significant predictor of academic performance.
- H<sub>A15</sub>: Career intention is a significant predictor of academic performance.
- H<sub>16</sub>: Overall student-athlete intention is not a significant predictor of academic performance.
- H<sub>A16</sub>: Overall student-athlete intention is a significant predictor of academic performance.
- H<sub>17</sub>: Perceived behavioral control is not a significant predictor of academic performance.
- H<sub>A17</sub>: Perceived behavioral control is a significant predictor of academic performance.
- H<sub>18</sub>: Ethnic identity is not a significant contributor to subjective norms.
- H<sub>A18</sub>: Ethnic identity is a significant contributor to subjective norms.
- H<sub>19</sub>: Family obligation is not a significant contributor to subjective norms.
- HA19: Family obligation is a significant contributor to subjective norms.
- H<sub>20</sub>: Cultural values are not a significant contributor to subjective norms.
- H<sub>A20</sub>: Cultural values are a significant contributor to subjective norms.

#### **Definition of Terms**

Academic Motivation. "The extent to which an individual is energized toward excelling in academic tasks" (Gaston, 2002, p. 11).

Academic Performance. "How well students performed in their courses" (Gaston, 2002, p. 11). Athletic Motivation. "The extent to which an individual is energized toward excelling in athletic tasks" (Gaston, 2002, p. 11).



Attitude. "An individual's general affective and cognitive orientations toward a given behavior" (Shen, McCaughtry, & Martin, 2008, p. 843).

*Career Motivation*. The extent to which an individual is energized toward excelling in a pursuit for a professional athletic career.

*Cultural Values*. "Culturally inculcated and endorsed sets of preferences and endorsements for ways of thinking and being" as shared by the specific culture (Podsiadlowski & Fox, 2011, p. 7; Phinney, 1990).

*Grade Point Average (GPA)*. The total number of grade points received for the classes a student takes in school, divided by the total number attempted.

*Ethnic Identity*. An individual's sense of belonging to a group defined by ones cultural heritage, including values, traditions, and often language (Phinney & Ong, 2007).

Family Obligation. "The extent to which individuals feel a sense of duty to assist one another and to take into account the needs and wishes of the family when making decisions" (Fuligni & Pederson, 2002, p. 856).

*Motivation*. "The degree to which individuals are directed toward, make choices about, persists on, and apply effort toward given tasks" (Gaston, 2002, p. 11).

National Collegiate Athletic Association (NCAA). An association which oversees the athletic programs of participating colleges and universities.

*Perceived Behavioral Control.* An individual's "perception of the ease or difficult of performing the behavior" (Wiethoff, 2004, p. 265).

*Polynesian*. Individuals' who self-identify as being a member of the people from the islands of the South Pacific.



*Student-athlete*. An individual who is enrolled as a student in an educational institution, and participates in a competitive sport for the institution they attend.

Subjective Norm. "The perceived social pressure to perform or not to perform the behavior" (Ajzen & Driver, 1991, p. 188).



#### Literature Review

College football coaches actively recruit Polynesians for their athletic ability (Tengan & Markham, 2009). During a student-athlete's college career, however, athletic eligibility hinges on AP (Reynolds et al., 2012), and administrators and coaches are searching for ways to help their student-athletes maintain eligibility. The TPB (Ajzen, 1991) will be used as the framework for this study to examine the AP of Polynesian student-athletes participating in Division I college football.

#### **Academic Performance**

Academic performance refers to how well students perform in their courses, and is measured by cumulative grade point average (GPA) (Gaston, 2002; Milton, Freeman, & Williamson, 2012). Standardized test scores and graduation rates have also been used to measure AP (Fuligni & Pedersen, 2002; Gaston-Gayles, 2004; Ivory, 2002; Owens & Massey, 2011; Sellers, 1992). While studies have been carried out to assess different factors which influence AP (Kerpelman, Eryigit, & Stephens, 2008; Klassen & Usher, 2010; Pajares & Urdan, 2006; Syed, Azmitia, & Cooper, 2011), the AP disparity between Whites and minorities is commonly discussed by scholars in the literature (Dekker & Fischer, 2008; Gonzales, Cauce, Friedman, & Mason, 1996; Otunuku & Brown, 2007; Ogbu, 1987; Pang, Han, & Pang, 2011; Reynolds, et al., 2012).

Minority academic performance. The academic achievement gap between Whites and minorities is regularly highlighted (Gaston-Gayles, 2004; Ivory, 2002; Noguera, 2003; Pang et al., 2011). Early anthropologists suggested that cultural conflicts between school environment, culture, and language barriers contributed to the academic underperformance of minority (Ogbu, 1987). Other studies have suggested biological and genetic differences, as well as perceptions of



bleak future career opportunities contribute to these academic differences (Benbow & Stanley, 1980; Ogbu, 1984). More recently, factors related to stereotype threat, socioeconomic disparities and racial discrimination have been correlated with minorities underperforming academically (Logel, Walton, Spencer, Peach, & Mark, 2012; Nguyen & Ryan, 2008). Walton and Spencer (2009) argue that standard measures of AP (GPA and test scores) undermine and underestimate the true academic ability and performance of ethnic minorities.

Non-cognitive variables (e.g. culture, ethnic identity, and motivation) have been found to be more informative than cognitive variables (e.g. high school GPA, standardized tests) when ascertaining AP among minorities (Hyatt, 2003; Ivory, 2002; Reynolds et al., 2012; Sedlacek, 1999; Simons & Van Rheenen, 2000; Tracey & Sedlacek, 1985), as well as among students in post-compulsory education (Richardson & Abraham, 2013; Dennis, Phinney, & Chuateco, 2005). For example, Dennis et al., (2005) found personal motivation and career motivation to be important predictors of GPA among first generation ethnic minority college students.

Motivation has also been found to be a predictor of AP among college student-athletes (Gaston-Gayles, 2004; Snyder, 1996).

Student-athletes and academic performance. Student-athletes are usually prominent figures on university and college campuses as well as within the local community (Comeaux & Harrison, 2011). Individuals' who are afforded this unique educational opportunity by means of athletic ability are expected to assume major responsibilities, including being able to balance their time and effort as a student and as an athlete (Hyatt, 2003). In other words, student-athletes are expected to be successful on the field as well as in the classroom. This has created distinct concerns over their AP, particularly since student-athletes generally do not perform as well as non-athletes in the classroom setting (Carodine, Almond, & Gratto, 2001; Maloney &



McCormick, 1993; Milton et al., 2012; Umbach, Palmer, Kuh, & Hannah, 2006), and football players receive a lower letter grade than non-athletes in approximately half of their courses when in-season (Maloney & McCormick, 1993).

A myriad of studies have looked at AP among college student-athletes in an attempt to uncover reasons for differences between individuals' AP (Comeaux & Harrison, 2011; Dilley-Knoles, Burnett, & Peak, 2010; Milton et al., 2012; Sedlacek & Adams-Gaston, 1992; Sellers, 1992). Studies have sought to relate these differences to non-cognitive factors, such as motivation, cultural values, social and family support, and demographic and precollege factors (Bowen & Levin, 2003; Gaston-Gayles, 2005; Reynolds et al., 2012; Simons et al., 1999). Findings suggest female student-athletes' tend to have higher GPA's than male student-athletes (Dilley-Knoles et al., 2010; Gaston-Gayles, 2004; Milton et al., 2012; Shuman, 2009), Whites have higher GPA's than minority (Gaston-Gayles, 2004; Reynolds et al., 2012; Sellers, 1992), and minority student-athletes, who participate in revenue generating sports (football and basketball) have the lowest graduation rates (Gaston-Gayles, 2004; Hyatt, 2003; Sellers, 1992).

Reasons for these findings stem in part from the extrinsic rewards available to student-athletes in regard to pursuing the 'athletic dream' (Gaston-Gayles, 2004; Shuman, 2009). For example, there are more professional avenues in sport for males than female. Also, one's socio-economic status may motivate the individual to use their athletic ability to earn a scholarship to go to college and advance professionally in their sport to earn an income (Gaston, 2002; Hyatt, 2003; Reynolds et al., 2012). Past scholarship implies male minority student-athletes who participate in revenue-generating sports are most at-risk academically. From an ethnic standpoint, however, the narrow scope of Whites contrasted with Blacks leaves the uniqueness of many ethnic groups on the margins and unexplored (Sellers, 1992; Tracey & Sedlacek, 1985;



Steinfeldt, Reed, & Steinfeldt, 2010). One ethnic group which falls in this category is Polynesian student-athletes.

## **Polynesian Student-Athletes**

Polynesians are individuals who self-identify as being from the islands of the South Pacific. They make up a small percentage (2.4%) of the college football population (Irick, 2011), yet today, there seems to be a heightened effort to tap into the pipeline of Polynesian football players (Harmon, 2012). Over the last decade, hundreds of Polynesians have been recruited to play college football (Irick, 2011), and it has been estimated a Samoan individual is 40% more likely than an individual growing up in the United States to make it to the professional league (Dodd, 2006; Dunne, 2011). Many young male Polynesians see the opportunity to use their physical prowess to advance professionally as a source of hope in being able to contribute financially to their entire family (Zakus & Horton, 2009). Eventually, an individual will retire from football, whether college or professional, making the implications of one's AP pertinent to future stability when transitioning into the next phase of life.

The AP of Polynesians has been largely marginalized, due in large part to Polynesians generally being grouped together with the Asian population (Kawaguchi, 2003; Zakus & Horton, 2009). This grouping impedes the true cultural perspective of both ethnic groups, given the different social and cultural norms and customs found in each aggregate (Mayeda & Okamoto, 2002; Pang et al., 2011). This clustering can further influence the way data is interpreted when it comes to understanding the actual AP of Asian and Pacific Island students (Pang et al., 2011; Saltiban, 2012). By understanding the factors which relate to AP of Polynesians specifically, scholars and administrators can better guide these student-athletes toward academic success (Gaston-Gayles, 2005).



## **Theory of Planned Behavior**

To understand factors which motivate AP among male Polynesian student-athletes, Ajzen's (1991) TPB will be used in from a broader perspective. As an extension to the Theory of Reasoned Action (TRA; Madden, Ellen, & Ajzen, 1992), the TPB examines the relationship among attitudes, subjective norms, perceived behavioral control, intentions, and behavior (Ajzen, 1991).

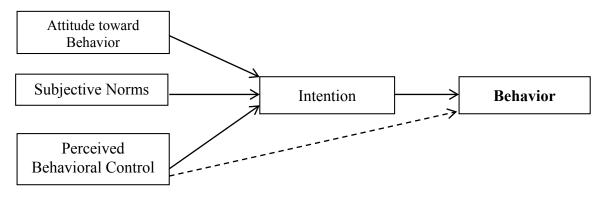


Figure 1. The Theory of Planned Behavior (Ajzen, 1991).

The addition of perceived behavioral control as a third predictor of behavior extends the TRA by considering non-volitional behavior as well as volitional behavior (Conner & Armitage, 1998), and therefore increases the predictive power of an individual's intention to perform a specific behavior (Ajzen, 1991; Holtzman, Jackson, Burrus, & Roberts, 2010). The TPB has been used extensively to predict health-related behaviors (Fishbein, 1980; Downs, Graham, Yang, Bargainnier, & Vasil, 2006; Taylor, Ward, Hill, & Hanson, 2010), and academic behavior (Davis et al., 2002; Richardson & Abraham, 2013; Lipnevich, et al., 2011).

A central tenet of the TPB is the intention to perform a given behavior. An immediate antecedent of behavior, intention refers to an individual's readiness to perform the given behavior (Ajzen & Driver, 1992; Davis et al., 2002). The strength of intention differs from individual to individual, thus reflecting the degree of effort exerted by the individual, or their

level of motivation, toward accomplishing the given behavior (Ajzen, 1991; Richardson & Abraham, 2013). Ajzen (1991) indicated "intentions are assumed to capture the motivational factors that influence behavior" (p. 181; Conner & Armitage, 1998). Therefore, based on this assumption, intention and motivation will be used synonymously in this study.

Intention. The TPB "is one of the most widely applied social cognitive models of motivation" (Richardson & Abraham, 2013, p. 626). While research examining the relationship between motivation and AP of college student-athletes is sparse, the number of articles is steadily increasing (Althouse, 2007; Gaston, 2002; Gaston-Gayles, 2004; 2005, Simons & Van Rheenen, 2000; Simons et al., 1999; Snyder, 1996; Shuman, 2009; Woodruff & Schallert, 2008). Gaston (2002) was one of the first scholars to directly examine academic and athletic motivations as non-cognitive variables in predicting AP among Division I level college student-athletes. In her findings, however, Gaston found a third type of motivation unique to student-athletes: career athletic motivation.

Where athletic motivation measured a student-athlete's desire to succeed in sports, career athletic motivation measured a student-athlete's desire to succeed in sports and pursue sport as a professional career. These tenets of motivation are unique to student-athletes because in order to be successful in the college student-athlete environment, they must be motivated to succeed both on the athletic field/court and academically. Gaston defined motivation as the "degree which individuals are directed toward, make choices about, persist on, and apply effort toward a given task" (p. 11), which parallels what Conner & Armitage (1998) state about intentions: "intentions represent a person's motivation in the sense of her or his conscious plan or decision to exert effort to enact the behavior" (p. 1430). Keeping in line with the TPB, this study will examine academic, athletic, and career motivation as academic, athletic, and career intention.



For college student-athletes, conflict can arise when determining how to effectively balance effort and time between scholarly and athletic goals (Gaston-Gayles, 2004; Simons et al., 1999; Woodruff & Schallert, 2008). Consequently, scholars, have examined the different types of student-athletes' motivation in relation to AP (Gaston-Gayles, 2004; 2005; Simons et al., 1999; Snyder, 1996; Woodruff & Schallert, 2008; Shuman, 2009). Gaston (2002) found female student-athletes had higher academic motivation than males, and male student-athletes who participated in revenue generated sports had higher athletic and career motivation than females and males who participated in non-revenue generated sports. Sellers (1992) found Black student-athletes who participate in revenue-generated sports go to college less prepared than their White counterparts; however, they were no less motivated academically to study, and placed importance on obtaining their degree. In her study of Division I college student-athletes, Gaston-Gayles (2004) found academic motivation to be a key predictor of academic achievement. Further athletic motivation and career motivation did not detract from academic achievement, which contradicted previous studies (Sellers, 1992; Simons et al., 1999).

While mixed results have been found when examining academic motivation, athletic motivation, and career motivation as indicators of AP, the TPB presents an empirically sound framework to predict behavior (Ajzen, 1991). It can be assumed the stronger an individual's intention towards achieving a higher GPA, the more likely one will work towards and achieve a higher GPA. If the primary goal of the NCAA is to ensure student-athletes graduate from their respective institutions (NCAA, 2012), then examining the different types of motivation or intentions student-athletes have will enable advisors to see if and where the motivational imbalance exist, and discuss ways the student-athlete can balance their time and efforts between their academic roles and athletic roles (Shuman, 2009).



According to TPB, intention to perform a specific behavior is shaped by an individual's attitude, subjective norms, and perceived behavioral control (Armitage & Conner, 2001). These factors are functions of the salient beliefs individuals hold with regard to the behavior (Manning, 2009). Salient beliefs are deeply held beliefs which influence one's decision making and values. Thus, beliefs influence an individuals' attitude, subjective norms, and perceived behavioral control. Attitude, subjective norms, and perceived behavioral control then shape the individual's intent to engage in and achieve the behavior (Ajzen, 1991).

Attitude toward behavior. Attitude refers to "an individual's general affective and cognitive orientations toward a given behavior" (Shen et al., 2008, p. 843). Attitude is influenced by an individual's salient behavioral beliefs concerning the positive or negative outcomes of a specific behavior (Ajzen, 2001; Davis et al., 2002). In this study, we examine attitude toward AP, specifically achieving a higher GPA.

**Subjective norms.** Subjective norms refer to "the perceived social pressure to perform or not to perform a behavior" (Ajzen & Driver, 1991, p. 188). Subjective norms are influenced by one's salient normative beliefs. These beliefs are concerned with the perceived expectations from important referent individuals or groups, (e.g. family members, peers, coaches etc.), and their approval or disapproval of the given behavior (Ajzen, 1991; Taylor et al., 2010). An individual's motivation to comply with the perceived expectations of different referents influences their intention to perform the behavior (Davis et al., 2002).

Given the importance Polynesians place on family and culture (Zakus & Horton, 2009); the pressure one perceives from their family and cultural ties, and the motivation to comply with those expectations can facilitate or impede an individual's performance of the behavior. Hence,



this study will use ethnic identity, family obligation and cultural values as contributors of subjective norms, to examine its influence in predicting AP.

Ethnic identity. Phinney and Ong (2007) referred to ethnic identity as being multi-faceted and "deriving from a sense of peoplehood within a group, a culture, and a particular setting" (p. 271). This sense of peoplehood within a group can create pressure on individuals and can impact an individual's decision-making as they comply with the expectations of their ethnic group. For Polynesians, success belongs to their people, not the individual, and failure is viewed in the same way (Zakus & Horton, 2009). The Polynesian student-athlete may comply with the perceived social pressure from their ethnic group to achieve a higher GPA because of the implications which an education yields for the individual, his family, and his people. As such, ethnic identity will contribute to subjective norms in this study.

Family obligation. Generally found within collectivist cultures (e.g. Latin American, Asian, and Polynesian), family obligation refers to the "extent to which family members feel a sense of duty to assist one another and to take into account the needs and wishes of the family when making decisions" (Fuligni & Pederson, 2002, p. 856; Fuligni et al., 1999). Fuligni and colleagues (1999) found within the United States, adolescents of Asian or Latin American descent quickly internalized their obligations to their family when making important decisions about their own lives (e.g. college or career), thus viewing their obligations as a lifelong commitment. Minority individuals tend to feel a greater sense of duty toward their family than American individuals, which can lead to increased motivation toward academic tasks (Fuligni, 2001; Tseng, 2004). Like other ethnic minorities, Polynesians feel a great sense of obligation toward their family (Zakus & Horton, 2009). They carry a deep sense of respect toward their parents and elders because of the sacrifices that have been made by parents and elders in order to



provide financially and physically for the family (Kearney & Donaghy, 2010; Saltiban, 2012). These sacrifices can either motivate or act as a constraint for Polynesian individuals as they seek to realize their aspirations for the sake of their family (Kearney & Donaghy, 2010; Zakus & Horton, 2009). In this study, family obligation will contribute to subjective norms.

Cultural values. Cultural values refer to "culturally inculcated and endorsed sets of preferences and endorsements for ways of thinking and being" (Podsiadlowski & Fox, 2011, p. 7; Phinney, 1990) as shared by the specific culture. A big part of the Polynesian culture is being able to give back to the people and to the family (Tengan & Markham, 2009), obey and respect the Elders (Franks, 2009), and practice spiritual devotion (Zakus & Horton, 2009). In addition to their athletic prowess, the aforementioned values attract coaches to Polynesian players (Corbett, 2013). A Polynesian student-athlete, however, may face conflict when trying to uphold their cultural values outside of their socio-cultural environment. Thus, cultural values contribute to subjective norms because "the factors of their [Polynesian's] success relate to how the social and cultural elements of their [Polynesian's] specific ontological agency is handled" (Zakus & Horton, 1991, p. 82) by administrators and organizations in their destination countries.

Examining subjective norms through ethnic identity, family obligation, and cultural values could yield critical knowledge regarding the motives of Polynesian football student-athletes by acknowledging the socio-cultural context and environment in which they were raised.

Perceived behavioral control. Perceived behavioral control refers to the individual's "perception of the ease or difficulty of performing a behavior" (Wiethoff, 2004, p.265). It has two components: (1) How much control a person perceives to have over the given behavior, and (2) how confident the individual feels about their capabilities to complete or not complete the behavior (Manning, 2009). Perceived behavioral control is determined by an individual's salient



control beliefs about the presence of factors that may hinder or facilitate performance of behavior (Armitage & Conner, 2001). These can include internal factors such as past experience, second-hand information, and acquired skills; or situational factors such as opportunities, accessibility of resources, or dependence on others (Ajzen, 1991). Further, perceived behavioral control is the only factor that is theorized to directly influence both behavior and intention. This study will examine student-athletes' perceived ability to overcome obstacles to achiever a higher GPA.

In general, the more favorable an individual's attitude, the stronger the subjective norms, and greater their perceived control of the behavior, the more likely an individual will intend to or be more motivated to engage in the behavior (Rise, Sheeran, & Hukkelberg, 2010). The stronger the intention, the more likely an individual will engage in and complete the behavior (Madden, Ellen, & Ajzen, 1992). Figure 2 illustrates how this study intends to use the TPB to predict AP among Polynesian student-athletes who participate in Division I college football.

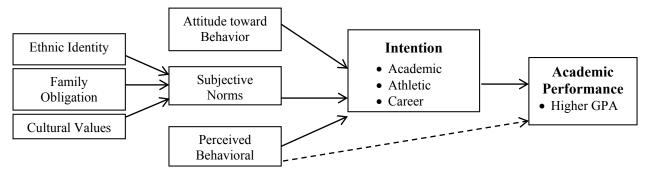


Figure 2. The Theory of Planned Behavior according to current study's variables.

## Summary

The TPB provides a strong theoretical framework to examine AP. When applied to the AP of Polynesian student-athletes, the TPB suggests academic intention, athletic intention, and career intention, together with perceived behavioral control, can be used to predict AP. Further, the intention to achieve a higher GPA is driven by ones' attitude, perceived social pressure by way of ethnic identity, family obligation, and cultural values, and the individual's perceived



behavioral control. Therefore, this study will examine how attitude, subjective norms, and perceived behavioral control influence intention (academic, athletic, and career) to achieve higher AP among male Polynesian student-athletes participating in Division I college football. Furthermore, subjective norms will be explored through the lens of ethnic identity, family obligation, and cultural values.



#### Methods

This study will investigate how attitude, subjective norms, and perceived behavioral control influence intention to increase AP among male Polynesian student-athletes, participating in Division I college football. Included in this chapter are: (a) Study Sample, (b) Instrumentation, (c) Design of the Study, (d) Data Collection Procedures, and (e) Data Analysis.

# **Study Sample**

The main criteria for participation include being a part of: (a) a Division I level college football program, (c) enrolled as a student and on the current team roster of their sport, and (d) be of Polynesian descent. Brigham Young University, University of Utah, Weber State University, Utah State University, and University of Hawaii have been purposively chosen and approached by the principal investigator to participate in this study. These universities were approached first due to their high concentration of male Polynesian student-athletes enrolled on the current football roster. Other universities which fit the criteria will be approached by the researcher at a later time. As universities' student-athlete academic directors participate in the study, they will be asked if they know of other programs that have Polynesian football student-athletes on their current roster. The study will snowball in participants until roughly 175 to 200 questionnaires have been completed.

#### Instrumentation

Four measures will be used to comprise a modified TPB questionnaire (Appendix A-1) which will assess the independent variables of this study: attitude, subjective norms, perceived behavioral control, and intention. These variables will be examined in relation to the dependent variable of this study, GPA.



Academic performance. The target behavior for this study is achieving a higher GPA. Within the literature, AP is interchangeably used with academic achievement and academic success. Given these different terms, researchers have consistently used GPA to operationalize AP (Gaston, 2002; Gaston-Gayles, 2004; 2005; Sellers, 1992). Each respondent's GPA will be collected from the appointed liaison of the respective university.

Intention. Three items will be used to examine each type of intention (academic, athletic, and career). Participants will indicate on a 7-point Likert scale ranging from 1 (definitely disagree) to 7 (definitely agree) to what extent they have decided to, will try to, and plan to: "Achieve a higher GPA this semester" (academic intention), "Focus and learn the skills and strategies taught by my coaches" (athletic intention), and "Make it to the professional level in my sport" (career intention) (Ajzen, 2002). Scores from the three questions measuring academic, athletic, and career intention will be summed together to create three separate total intention scores (academic, athletic, and career). An overall student-athlete intention score will also be determined by summing the respondent's separate total intention scores.

The Student-Athletes' Motivation toward Sports and Academics Questionnaire (SAMSAQ; Gaston, 2002) (Appendix A-2) will be used to measure the motivations of college student-athletes'. The listed alphas for each subscale were reached using a sample of Division I level college student-athletes. The SAMSAQ consists of 30 items measured on a 6-point Likert scale, 1 (very strongly disagree) to 6 (very strongly agree), and is used to measure academic, athletic, and career motivation (Gaston 2002; Gaston-Gayles, 2004; 2005). An example of an item measuring academic motivation is "I am confident that I can achieve a high grade point average this year (3.0)". This motivation category is measured using 16-items, and has a Cronbach's value of .79. A sample question measuring athletic motivation is "Achieving a high



level of performance in my sport is an important goal for me this year". This motivation category is measured using eight items and has a Cronbach's alpha of .86. Finally, a sample question measuring career motivation is "I chose to play sport because it is something that I am interested in as a career". This motivation category is measured using five items and has a Cronbach's alpha of .84.

A correlation will be run between the scores which will measure academic, athletic, and career intention from both the TPB, and SAMSAQ (Gaston, 2002) instruments. If a significant positive correlation is found, the scores will be standardized and the academic, athletic, and career intention scores from each instrument will be averaged together. If the scores are not strongly positively correlated, different models will be built using both intention scores.

Attitude. Attitude toward achieving a higher GPA this semester will be measured using five evaluative semantic differential scales that use a 7-point Likert scale (Davis et al., 2002). To assess how positively or negatively participants view achieving a higher GPA this semester, the anchors of the scale will be as follows: *unenjoyable/enjoyable, useless/beneficial, bad/good, unpleasant/pleasant,* and *undesirable/desirable*. The respondents' scores on the five evaluative semantic differential scales will be summed to create a possible range from 7 to 35 for the attitude variable. The question and anchors were based on guidelines suggested by Ajzen (2002) and Davis et al., (2002).

**Subjective norms.** In this study, ethnic identity, family obligation, and cultural values contribute to subjective norms. As such, each variable will be measured by different scales independently.

*Ethnic identity.* Ethnic identity will be measured using Roberts et al. (1999) Revised (12-item) Multigroup Ethnic Identity Measure (Appendix A-3), which is a modified version of



the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992). The Revised MEIM will be measured on a 7-point Likert scale, 1 (strongly disagree) to 7 (strongly agree), with 4 as a neutral position. A sample item is "I have a clear sense of my ethnic background and what it means for me". The MEIM has a reported Cronbach's alpha of .90 with college students based on a 4-point Likert scale (Phinney, 1992). The reliability of the Revised (12-item) MEIM was found to be equal to that of the earlier 14-item scale (Roberts et al., 1999).

Family obligation. Family obligation will be measured using two scales developed by Fuligni and Pedersen (2002) using a 7-point Likert scale, 1 (not important at all) to 7 (very important). The scales are, 'Future Support' (Appendix A-4) and 'Respect for Family' (Appendix A-4). A sample question measuring future support is "How important is it for you to help take care of your brothers and sisters in the future?" Future support will be measured using 6-items and has a Cronbach's alpha of .81 with ethnic minority adolescent students, based on a 5-point Likert scale. An example of an item measuring respect for family is "How important is it for you to do well for the sake of your family?" This seven item scale has a Cronbach's alpha of .82 with ethnic minority adolescent students, based on a 5-point Likert scale.

Cultural values. Cultural values will be measured using one of the three scales which comprise the Cultural Value Orientation Scale (Gaines et al., 1997) (Appendix A-5).

Podsiadlowski and Fox (2011) found that out of several ethnic groups, Polynesians distinguished the least between family, friends, and strangers, thus employing high collectivistic values.

Hence, this study will use the collectivism sub-scale to measure cultural values. The collectivism scale will be measured on a 7-point Likert scale, 1 (very strongly disagree) to 7 (very strongly agree). Collectivism is concerned with an individual's orientation toward the welfare of their larger community. An example of an item measuring collectivism is "I have an



obligation to give back to my community". The scale has a Cronbach's value of .76 with a sample ranging from middle-aged working adults to college students, based on a 5-point Likert scale.

The scores of each scale will measure ethnic identity, family obligation and cultural values. Once these variables have been individually evaluated, they will be used to predict the latent variable of overall subjective norms.

Perceived behavioral control. The following four items will be used to measure participants' perceived behavioral control over achieving a higher GPA this semester: (1) "If I want to I can achieve a higher GPA this semester" (strongly disagree/strongly agree), (2) "It is mostly up to me whether I achieve a higher GPA this semester" (strongly disagree/strongly agree), (3) "For me, achieving a higher GPA this semester..." (impossible/possible), and (4) "How much control do you believe you have over achieving a higher GPA this semester?" (no control/complete control). The four items will be summed to represent a respondent's perceived behavioral control and are based on guidelines suggested by Ajzen (2002).

**Demographics.** Demographic information will be included to provide potential controlling factors. They will include age, class standing, ethnicity, family size, place of birth, and socioeconomic status.

#### **Data Collection Procedures**

The researcher will contact the student-athlete Academic Director at Brigham Young University, University of Utah, Weber State University, Utah State University, and University of Hawaii to explain the study and discuss the university's participation in the study. The researcher will outline the study's importance to Polynesian student-athletes, study procedures (participant involvement, items to expect on the questionnaire, any risks which may be involved



etc.), and will seek permission from the student-athlete academic director to conduct the study on campus. Permission will also be sought from the participants and student-athlete academic director for access to the participants' cumulative GPA at the end of the Fall 2013 semester. Permission will be obtained from participants through reading and signing a consent form. The researcher will assure respondents, student-athlete academic director, and all other administrators involved that extreme caution will be taken in keeping participant's identification information confidential until the participant's questionnaire and GPA can be matched. Further, administrators will be advised that once the matching process is completed, all identifying information will be deleted. Once permission has been granted to access grades, the researcher will ask the student-athlete academic director to: (1) write a letter of support for the purpose of the Institutional Review Board (IRB) and thesis committee, and (2) appoint a liaison (e.g. football academic advisor) for ease of communication and release of the grades. The researcher will seek IRB approval from all participating universities, where required.

A pilot study has been conducted to test the usability of this study's questionnaire. The only criteria the researcher used to recruit participants for the pilot study was that the individual must be a student-athlete at Brigham Young University. No identifying information was collected. The pilot study will be reviewed to make adjustments to the final questionnaire where it may be deemed necessary.

The researcher will travel to participating universities within Utah at a specified time coordinated with the student-athlete academic director to administer the online questionnaire. The universities in Utah recruit a substantial number of Polynesian football student-athletes, and due to the study's specific population, the researcher will travel to those schools to ensure the study has the ability to reach the target sample size. Respondents will be advised that



participation is voluntary. Subsequently, individuals who choose to participate will be given a consent form (Appendix A-6) by the researcher, which will outline the study and seek the individual's consent to access their GPA at the end of the semester. Once participants have signed the consent form, they will be directed to the online questionnaire. It is anticipated student-athletes will complete the questionnaire either after practice or during a required study hall. The questionnaire will be administered online using Qualtrics and should take 15-20 minutes to complete. If there is no online access or limited access at the participating schools, the researcher will administer a paper and pencil questionnaire. While the intent is to keep the method of collecting consistent by administering the questionnaire online, Ward, Clark, Zabriskie, and Morris (2012) found that there is very little difference between participants taking a questionnaire online or by paper and pencil.

Where it is not feasible for the researcher to travel, a specified time and place will be coordinated with the liaison (e.g. football academic advisor) of the respective institutions for when the questionnaire will be completed. Once a time has been agreed upon, an e-mail will be sent to the liaison, who will forward it on to participants. The email will contain a brief outline of the study, a copy of the consent form, a link to the online questionnaire, and the researcher's contact information. If participants have any questions regarding the study or questionnaire, they will be advised to contact the researcher. The first page of the questionnaire will be the implied consent form (Appendix A-7). It will explain the study and inform respondents that completion of the questionnaire implies their consent to be part of this study, and grants the researcher access to their grades at the end of the semester.

At the end of the semester, the researcher will contact the liaison to obtain the participants' grades and begin the matching process. Using the student's school identification



number, only the researcher will go through and match each questionnaire with the corresponding grade, one university at a time. Once the matching process has been completed, the researcher will delete all information which could be used to identify the participants.

# **Data Analysis**

Data will be cleaned and screened looking for improbable outliers within the given ranges. Based on the screening, participants who do not meet the established criteria will be eliminated prior to conducting a structural equation model (SEM). Structural equation modeling will be conducted using a maximum likelihood estimation technique in Amos 20.0 to evaluate the model. Maximum likelihood estimation will be used because it is robust even when the data are not normally distributed (Chou & Bentler, 1995).

As specified by the model, direct paths will be placed from attitude, subjective norms, and perceived behavioral control to intention (academic, athletic, and career), from perceived behavior control to behavior, from intention (academic, athletic, and career) to behavior, and from ethnic identity, family obligation, and cultural values to subjective norms. In addition, attitude, subjective norms, and perceived behavior control will be allowed to correlate, as well as ethnic identity, family obligation, and cultural values (see Figure 3).

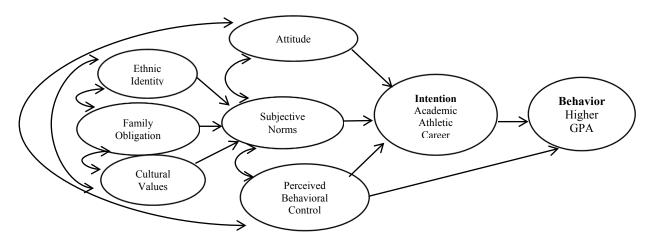


Figure 3. Direct Paths Model of the TPB



A four step approach (Kline, 2005) will be used to estimate the relationships of ethnic identity, family obligation, and cultural values on subjective norms; attitude, subjective norms, and perceived control on intention; and intention on behavior. First, model specification will test if the structural model is consistent with the data. This involves building a path diagram and testing it. The path analysis will first test deleted paths based on the theory, test the specified paths, and finally trim the model. Revisions to the path diagram will be based on both theory and statistical diagnostics. Second, the measurement model will be revised if needed.

Confirmatory factor analysis (CFA) will be used to test attitude, subjective norms, perceived control, intention, and behavior. Third, model estimation will combine the path diagram and CFA to construct the hybrid model. Analysis will be done to test the specified paths and trim paths based on the model theory and statistical diagnostics. Fourth, the model will be tested using model fit indices to determine if the modified model is better than the null (Kline, 2005).

As recommended by Kline (2005), a variety of conservative model fit indices will be examined to evaluate overall model fit. First, a chi-square test will be used. A non-significant chi-square statistic is unlikely (Kline) and a significant chi-square test is typically not used to reject a model. To account for the expected larger sample size, a  $\chi 2/df$  ratio will be examined. Absolute fit indexes will be examined and the comparative fit index (CFI) will be considered to evaluate the model's absolute or parsimonious fit relative to the null or hypothetical model. An index score of .95 or greater is desired. The root mean square error of approximation (RMSEA) will be considered to assess fit based on the magnitude of the residuals. An index score of .08 or less is desired. The RMSEA is often considered one of the most valuable fit indices in SEM (Martin et al., 2005).



### References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Ajzen, I. (2001). Nature and operation of attitudes. Annual Review of Psychology, 52(1), 27-58.
- Ajzen, I. (2002). Constructing a theory of planned behavior questionnaire: Conceptual and methodological considerations. Retrieved May 3, 2012, from http://www.uni-bielefeld.de/ikg/zick/ajzen%20construction%20a%20tpb%20questionnaire.pdf.
- Ajzen, I., & Driver, B. L. (1991). Prediction of leisure participation from behavioral, normative, and control beliefs: An application of the theory of planned behavior. *Leisure Sciences*, 13(3), 185-204.
- Ajzen, I., & Driver, B. L. (1992). Application of the theory of planned behavior to leisure choice. *Journal of Leisure Research*, 50(2), 179-211.
- Althouse, J. N. (2007). Testing a model of first-semester student-athlete academic motivation and motivational balance between academics and athletics. (Doctoral Dissertation).

  Pennsylvania State University, University Park, PA.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behavior: A metaanalytic review. *British Journal of Social Psychology*, 40(4), 471-499.
- Benbow, C. P., & Stanley, J. C. (1980). Sex differences in mathematical ability: Fact or artifact? *Science*, 210, 1262-1264.
- Bimper, A. Y., Harrison, L., & Clark, L. (2013). Diamonds in the rough: Examining a case of successful black male student athletes in college sport. *Journal of Black Psychology*, 39(2), 107-130.



- Bowen, W. G., & Levin, S. A. (2003). *Reclaiming the game: College sports and educational values*. Princeton, NJ: Princeton University Press.
- Carodine, K., Almond, K. F., & Gratto, K. K. (2001). College student athlete success both in and out of the classroom. *New Directions for Student Services*, 2001(93), 19-33.
- Chou, C., & Bentler, P.M. (1995). Estimates and tests in structural equation modeling. In R.H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 37-55). Thousand Oaks, CA: Sage.
- Cole, B., Matheson, K., & Anisman, H. (2007). The moderating role of ethnic identity and social support on relations between well-being and academic performance. *Journal of Applied Social Psychology*, *37*(3), 592-615.
- Comeaux, E., & Harrison, C. K. (2011). A conceptual model of academic success for studentathletes. *Educational Researcher*, 40(5), 235-245.
- Conner, M., & Armitage, C. J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology*, 28(15), 1429-1464.
- Corbett, J. (2013, February 3). Polynesian players bring passion, power. *USA Today*. Retrieved from http://www.usatoday.com/story/sports/nfl/2013/02/03/polynesian-super-bowl/1882001/
- Davis, L. E., Ajzen, I., Saunders, J., & Williams, T. (2002). The decision of African American students to complete high school: An application of the theory of planned behavior. *Journal of Education Psychology*, 94(4), 810-819.
- Dekker, S., & Fischer, R. (2008). Cultural differences in academic motivation goals: A metaanalysis across 13 societies. *The Journal of Educational Research*, 102(2), 99-110,



- Dennis, J. M., Phinney, J. S., & Chuateco, L. I. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development*, 46(3), 223-236.
- Dilley-Knoles, J., Burnett, J. S., & Peak, K. W. (2010). Making the grade: Academic success in today's athlete. *The Sport Journal*, *13*(1). Retrieved from http://www.thesportjournal.org/article/making-grade-academic-success-today-s-athlete
- Dodd, D. (2006, February 21). Samoan influence being felt at every level. *CBS Sports*. Retrieved from http://www.cbssports.com/collegefootball/story/9253482
- Downs, D. S., Graham, G. M., Yang, S., Bargainnier, S., & Vasil, J. (2006). Youth exercise intention and past exercise behavior: Examining the moderating influences of sex and meeting exercise recommendations. *Research Quarterly for Exercise and Sport*, 77(1), 91-99.
- Dunne, T. (2011, August 31). Rookie linebackers have made their mark. *The Journal Sentinel*. Retrieved from http://www.jsonline.com/sports/packers/128856798.html
- Fishbein, M. (1980). A theory of reasoned action: Some applications and implications.

  Nebraska Symposium on Motivation, 27, 65-116.
- Franks, J. S. (2009). Pacific Islanders and American football: Hula honeys, throwin' Samoans and the rock. *International Journal of the History of Sport*, 26(16), 2397-2411.
- Fuligni, A. J. (2001). Family obligation and the academic motivation of adolescents from Asian,

  Latin American and European backgrounds. *New Directions for Child and Adolescent*Development, 2001(94), 61-76.
- Fuligni, A. J., & Pedersen, S. (2002). Family obligation and the transition to young adulthood. *Developmental Psychology*, 38(5), 856-868.



- Fuligni, A. J., Tseng, V., & Lam, M. (1999). Attitudes towards family obligations among

  American adolescents with Asian, Latin American, and European backgrounds. *Child Development*, 70(4), 1030-1044.
- Gaines, S. O., Marelich, W. D., Bledsoe, K. L., Steers, W. N., Henderson, M. C., Granrose, C. S.,...Page, M. S. (1997). Links between race/ethnicity and cultural values as mediated by racial /ethnic identity and moderated by gender. *Journal of Personality and Social Psychology*, 72(6), 1460-1476.
- Gaston, J. L. (2002). *A study of student athletes' motivation toward sports and academics*. (Doctoral Dissertation). Ohio State University, Columbus, OH.
- Gaston-Gayles, J. L. (2004). Examining academic and athletic motivation among student athletes at a Division I university. *Journal of College Student Development*, 45(1), 75-83.
- Gaston-Gayles, J. L. (2005). The factor structure and reliability of the student athletes' motivation toward sports and academics questionnaire (SAMSAQ). *Journal of College Student Development*, 46(3), 317-327.
- Gonzales, N. A., Cauce, A. M., Friedman, R. J., & Mason, C. A. (1996). Family, peer, and neighborhood influences on academic achievement among African-American adolescents: One-year prospective effects. *American Journal of Community Psychology*, 24(3), 365-387.
- Harmon, D. (2012, July 20). Hiring of Atuaia will help prime BYU's pipeline to the Polynesian community. *Deseret News*. Retrieved from http://www.deseretnews.com/article/765591173/Hiring-of-Atuaia-will-help-prime-BYUs-pipeline-to-the-Polynesian-community.html



- Holtzman, S., Jackson, T., Burrus, J., & Roberts, R. D. (2010, October). *Measuring goal-setting attitudes and predicting academic outcomes using the theory of planned behavior*. Paper presented at the 41<sup>st</sup> annual meeting of the Northeastern Educational Research Association (NERA), Rocky Hill, CT.
- Hyatt, R. (2003). Barriers to persistence among African American intercollegiate athletes: A literature review of non-cognitive variables. *College Student Journal*, *37*(2), 260-275.
- Ivory, L. I. (2002). Ethnic identity, college academic self-efficacy and academic performance of African American and Puerto Rican college students under the aegis of a higher education opportunity program. (Doctoral Dissertation). Columbia University, New York, NY.
- Irick, E. (2011, September 15). NCAA race and gender demographics, 1995-2011 [United States] [Computer File]. *ncaa.org*.
- Kawaguchi, S. (2003). Ethnic identity development and collegiate experience of Asian Pacific American students: Implications for practice. *NASPA Journal*, *40*(3), 13-29.
- Kalavite, T. (2010). Fononga'A fakahalafononga: Tongan students' journey to academic achievement in New Zealand tertiary education. (Unpublished Dissertation). University of Waikato, Hamilton, New Zealand.
- Kearney, J., & Donaghy, M. (2010). Bridges and barriers to success for Pacific Islanders completing their first year at an Australian university. *First Year Experience in Higher Education. Queensland University of Technology: QUT Publishing.*
- Kerpelman, J. L., Eryigit, S., & Stephens, C. J. (2008). African American adolescents' future education orientation: Associations with self-efficacy, ethnic identity, and perceived parental support. *Journal of Youth and Adolescence*, *37*(8), 997-1008.



- Klassen, R. M., & Usher, E. L. (2010). Self-efficacy in educational settings: Recent research and emerging directions. In Timothy C. Urdan, & Stuart A. Karabenick (eds.) *Advances in Motivation and Achievement, Volume 16 The Decade Ahead: Theoretical Perspectives on Motivation and Achievement* (pp. 1-33). Bradford, GBR: Emerald Group Publishing Limited.
- Kline, R. (2005). *Principles and practice of structural equation modeling* (2<sup>nd</sup> ed.). New York: Guildford Press.
- Lipnevich, A. A., MacCann, C., Krumm, S., Burrus, J., & Roberts, R. D. (2011). Mathematics attitudes and mathematics outcomes of U.S. and Belarusian middle school students. *Journal of Educational Psychology*, 103(1), 105-118.
- Logel, C. R., Walton, G. M., Spencer, S. J., Peach, J., & Mark, Z. P. (2012). Unleashing latent ability: Implications of stereotype threat for college admissions. *Educational Psychologist*, 47(1), 42-50.
- Madden, T. J., Ellen, P., & Ajzen, I. (1992). A comparison of the theory of planned behavior and the theory of reasoned action. *Personality and Social Psychology Bulletin*, 18(1), 3-9.
- Maloney, M. T., & McCormick, R. E. (1993). An examination of the role that intercollegiate athletic participation plays in academic achievement: Athletes' fears in the classroom. *Journal of Human Resources*, 555-570.
- Manning, M. (2009). The effects of subjective norms on behavior in the theory of planned behavior: A meta-analysis. *The British Psychological Society, 48*, 649-705.
- Martin, J. J., Kulinna, P. H., McCaughtry, N., Cothran, D., Dake, J., & Fahoome, G. (2005). The Theory of Planned Behavior: Predicting physical activity and cardiorespiratory fitness in African American children. *Journal of Sport and Exercise Psychology*, 29, 225-238.



- Mayeda, D. T., & Okamoto, S. K. (2002). Challenging the "Asian pacific American" rubric: Social constructions of ethnic identity among Samoan youth in Hawaii. *Journal of Poverty*, 6(4), 43-62.
- Milton, P. R., Freeman, D., & Williamson, L. M. (2012). Do athletic scholarships impact academic success of intercollegiate student-athletes: An exploratory investigation. *Journal of Issues in Intercollegiate Athletics*, 5, 329-338.
- National Commission on Asian American and Pacific Islander Research in Education (CARE).

  (2010). Federal higher education policy priorities and the Asian American and Pacific

  Islander community. Retrieved July 23, 2013, from

  <a href="http://apiasf.org/CAREreport/2010\_CARE\_report.pdf">http://apiasf.org/CAREreport/2010\_CARE\_report.pdf</a>.
- NCAA. (2012, August 1). Academic philosophy. *ncaa.org*. Retrieved March 3, 2013, from http://www.ncaa.org/wps/wcm/connect/public/NCAA/Academics/Division+I/.
- Nguyen, H. D., & Ryan, A. M. (2008). Does stereotype threat affect test performance of minorities and women? A meta-analysis of experimental evidence. *Journal of Applied Psychology*, 93(6), 1314-1334.
- Noguera, P. A. (2003). The trouble with black boys: The role and influence of environmental and cultural factors on the academic performance of African American males. *Urban Education*, 38(4), 431-459.
- Ogbu, J. U. (1984). *Understanding community forces affecting minority students' academic effort*. Unpublished manuscript prepared for The Achievement Council of California, Oakland.
- Ogbu, J. U. (1987). Variability in minority school performance: A problem in search of an explanation. *Anthropology & Education Quarterly*, 18(4), 312-334.



- Otunuku, M., & Brown, G. T. (2007). Tongan students' attitudes towards their subjects in New Zealand relative to their academic achievement. *Asia Pacific Education Review, 8*(1), 117-128.
- Owens, J., & Massey, D. S. (2011). Stereotype threat and college academic performance: A latent variables approach. *Social Science Research*, 40(1), 150-166.
- Pajares, F., & Urdan, T. (Eds.). (2006). *Self-efficacy beliefs of adolescents*. Information Age Publishing.
- Pang, V. O., Han, P. P., & Pang, J. M. (2011). Asian American and Pacific Islander students: equity and the achievement gap. *Educational Researcher*, 40(8), 378-389.
- Perreira, K. M., Fuligni, A., & Potochnick, S. (2010). Fitting in: The roles of social acceptance and discrimination in shaping the academic motivations of Latino youth in the U.S. southeast. *Journal of Social Issues*, 66(1), 131-153.
- Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin*, 108(3), 499-514.
- Phinney, J. S. (1992). The Multigroup ethnic identity measure a new scale for use with diverse groups. *Journal of Adolescent Research*, 7(2), 156-176.
- Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity:

  Current status and future directions. *Journal of Counseling Psychology*, *54*(3), 271-281.
- Podsiadlowski, A., & Fox, S. (2011). Collectivist value orientations among four ethnic groups:

  Collectivism in the New Zealand context. *New Zealand Journal of Psychology*, 40(1), 5-18.



- Reynolds, L., Fisher, D., & Cavil, J. K. (2012). Impact of demographic variables on African-American student athletes' academic performance. *Educational Foundations*, 26(3), 93-111.
- Richardson, M., & Abraham, C. (2013). Modeling antecedents of university students' study behavior and grade point average. *Journal of Applied Social Psychology*, 43, 626-637.
- Rise, J., Sheeran, P., & Hukkelberg, S. (2010). The role of self-identity in the theory of planned behavior: A meta-analysis. *Journal of Applied Social Psychology*, 40(5), 1085-1105.
- Roberts, R. E., Phinney, J. S., Masse, L. C., Chen, Y. R., Roberts, C. R., & Romero, A. (1999).

  The structure of ethnic identity of young adolescents from diverse ethnocultural groups.

  The Journal of Early Adolescence, 19(3), 301-322.
- Saltiban, B. O. (2012). Storying academic spaces: Reflections, narratives, and interpretations of Tongan students' educational experiences. (Doctoral Dissertation). University of Utah, Salt Lake City, UT.
- Sedlacek, W. E. (1999). Black students on White campuses: 20 years of research. *Journal of College Student Development*, 40(5), 538-550.
- Sedlacek, W. E., & Adams-Gaston, J. (1992). Predicting the academic success of student-athletes using SAT and non-cognitive variables. *Journal of Counseling and Development*, 70(6), 724-727.
- Sellers, R. M. (1992). Racial differences in the predictors of academic achievement of studentathletes of Division I revenue-producing sports. *Sociology of Sport Journal*, *1*, 46-51.
- Shen, B., McCaughtry, N., & Martin, J. (2008). Urban adolescents' exercise intentions and behaviors: An exploratory study of a trans-contextual model. *Contemporary Educational Psychology*, 33, 841-858.



- Shuman, M. P. (2009). Academic, athletic, and career athletic motivation as predictors of academic performance in student athletes at a Division I university. (Doctoral Dissertation). University of North Carolina, Greensboro, NC.
- Simons, H. S., Van Rheenen, D., & Covington, M. V. (1999). Academic motivation and the student-athlete. *Journal of College Student Development*, 40, 151-161.
- Simons, H., & Van Rheenen, D. (2000). Noncognitive predictors of student-athletes' academic performance. *Journal of College Reading and Learning*, *30*, 167-193.
- Snyder, P. L. (1996). Comparative levels of expressed academic motivation among Anglo and African American university student-athletes. *Journal of Black Studies*, *26*(6), 651-667.
- Steinfeldt, J. A., Reed, C., & Steinfeldt, M. C. (2010). Racial and athletic identity of African American football players at historically black colleges and universities and predominantly white institutions. *Journal of Black Psychology*, *36*(1), 3-24.
- Syed, M., Azmitia, M., & Cooper, C. R. (2011). Identity and academic success among underrepresented ethnic minorities: An interdisciplinary review and integration. *Journal of Social Issues*, 67(3), 442-468.
- Taylor, S. M., Ward, P., Hill, B., & Hanson, C. (2010). Influences on active family leisure and its relationship to obesity. (Unpublished master's thesis). Brigham Young University, Provo, UT.
- Tengan, T. P., & Markham, J. M. (2009). Performing Polynesian masculinities in American football: From 'rainbows to warriors'. *The International Journal of the History of Sport,* 26(16), 2412-2431.



- Tracey, T. J., & Sedlacek, W. E. (1985). The relationship of noncognitive variables to academic success: A longitudinal comparison by race. *Journal of College Student Personnel*, *26*, 405-410.
- Tseng, V. (2004). Family interdependence and academic adjustment in college: Youth from immigrant and US-born families. *Child Development*, 75(3), 966-983.
- Umbach, P. D., Palmer, M. M., Kuh, G. D., & Hannah, S. J. (2006). Intercollegiate athletes and effective educational practices: Winning combination or losing effort? *Research in Higher Education*, 47, 709-733.
- Walton, G. M., & Spencer, S. J. (2009). Latent ability: Grades and test scores systematically underestimate the intellectual ability of negatively stereotyped students. *Psychological Science*, 20, 1132-1139.
- Ward, P., Clark, T., Zabriskie, R., & Morris, T. (2012). Paper/pencil versus online data collection: An exploratory study. *Journal of Leisure Research*, 44(4), 507-530.
- Wiethoff, C. (2004). Motivation to learn and diversity training: Application of the Theory of Planned Behavior. *Human Resource Development Quarterly*, *15*(3), 263-278.
- Woodruff, A. L., & Schallert, D. L. (2008). Studying to play, playing to study: Nine college student-athletes' motivational sense of self. *Contemporary Educational Psychology*, 33(2008), 34-57.
- Zakus, D., & Horton, P. (2009). Pasifika in Australian rugby: Emanant cultural, social and economic issues. *Sporting Traditions*, 26(2), 67-86.

# Appendix A-1: Modified Theory of Planned Behavior Questionnaire

# **QUESTIONNAIRE**

This questionnaire should take 15-20 minutes to complete. Your responses are voluntary and will be kept confidential.

## **Section 1**

Please use the following scale to respond to each statement. Circle the number that best describes to what extent you *disagree* or *agree* with the following statements. Only circle one number.

Definitely Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Definitely Agree
1	2	3	4	5	6	7

1	I have <b>decided</b> to achieve a higher GPA this semester because it is important for me to learn what is taught in my courses	1	2	3	4	5	6	7
2	I will try to achieve a higher GPA this semester because it is important for me to learn what is taught in my courses	1	2	3	4	5	6	7
3	I <b>plan</b> to achieve a higher GPA this semester because it is important for me to learn what is taught in my courses.	1	2	3	4	5	6	7
4	I have <b>decided</b> to focus and learn the skills and strategies taught by my coaches	1	2	3	4	5	6	7
5	I will try to focus and learn the skills and strategies taught by my coaches	1	2	3	4	5	6	7
6	I <b>plan</b> to focus and learn the skills and strategies taught by my coaches	1	2	3	4	5	6	7
7	I have <b>decided</b> I can make it to the professional level in my sport	1	2	3	4	5	6	7
8	I will try to make it to the professional level in my sport	1	2	3	4	5	6	7
9	I <b>plan</b> to make it to the professional level in my sport	1	2	3	4	5	6	7



## **Section 2**

Please use the scale below to finish the statement below. Only circle one number.

"Achieving a higher GPA this semester is..."

Unenjoyable	1	2	3	4	5	6	7	Enjoyable
Useless	1	2	3	4	5	6	7	Beneficial
Bad	1	2	3	4	5	6	7	Good
Unpleasant	1	2	3	4	5	6	7	Pleasant
Undesirable	1	2	3	4	5	6	7	Desirable

## **Section 3a**

Circle the number that best describes your answer with each statement. Only circle one number.

My parents believe that it is important that I achieve a higher GPA this semester

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

How important is it to you that your parents believe that you should achieve a higher GPA this semester

Not at all						Very
Important						Important
1	2	3	4	5	6	7

My coaches believe that it is important that I achieve a higher GPA this semester

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

How important is it to you that your coaches believe that you should achieve a higher GPA this semester

Not at all Important						Very Important
1	2	3	4	5	6	7

# **Section 3b**

Please use the following scale to respond to each statement. Circle the number that best describes how much you *agree* or *disagree* with each statement. Only circle one number.

Strongly Disagree			Neutral			Strongly Agree
1	2	3	4	5	6	7

1	I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs	1	2	3	4	5	6	7
2	I am active in organizations or social groups that include mostly members of my own ethnic group	1	2	3	4	5	6	7
3	I have a clear sense of my ethnic background and what it means for me	1	2	3	4	5	6	7
4	I think a lot about how my life will be affected by my ethnic group membership	1	2	3	4	5	6	7
5	I am happy that I am a member of the group I belong to	1	2	3	4	5	6	7
6	I have a strong sense of belonging to my own ethnic group	1	2	3	4	5	6	7
7	I understand pretty well what my ethnic group membership means to me	1	2	3	4	5	6	7
8	In order to learn more about my ethnic background, I have often talked to other people about my ethnic group	1	2	3	4	5	6	7
9	I have a lot of pride in my ethnic group	1	2	3	4	5	6	7
10	I participate in cultural practices of my own group, such as special food, music, or customs	1	2	3	4	5	6	7
11	I feel a strong attachment towards my own ethnic group	1	2	3	4	5	6	7
12	I feel good about my cultural or ethnic background	1	2	3	4	5	6	7

## **Section 3c**

Please use the following scale to respond to each statement. Circle the number that best describes how much you *agree* or *disagree* with each statement. Only circle one number.

Strongly Disagree			Neutral			Strongly Agree
1	2	3	4	5	6	7

"In general, how important is it to you that you..."

1	Treat your parents with great respect	1	2	3	4	5	6	7
2	Follow your parents' advice about choosing friends	1	2	3	4	5	6	7
3	Do well for the sake of your family	1	2	3	4	5	6	7
4	Follow your parents' advice about choosing a job or major in college	1	2	3	4	5	6	7
5	Treat your grandparents with great respect	1	2	3	4	5	6	7
6	Respect your older brothers and sisters	1	2	3	4	5	6	7
7	Make sacrifices for your family	1	2	3	4	5	6	7

# **Section 3d**

Please use the following scale to respond to each statement. Circle the number that best describes how much you *agree* or *disagree* with each statement. Only circle one number.

"How important is it to you that in the future you..."

1	Help your parents financially	1	2	3	4	5	6	7
2	Live at home with your parents until you are married	1	2	3	4	5	6	7
3	Help take care of your brothers and sisters	1	2	3	4	5	6	7
4	Spend time with your parents even after you no longer live with them	1	2	3	4	5	6	7
5	Live near your parents	1	2	3	4	5	6	7
6	Have your parents live with you when they get older	1	2	3	4	5	6	7

# **Section 3e**

Please use the following scale to respond to each statement. Circle the number that best describes how much you *agree* or *disagree* with each statement. Only circle one number.

Strongly Disagree			Neutral			Strongly Agree
1	2	3	4	5	6	7

1	I don't feel that I'm a success unless I've helped others succeed as well	1	2	3	4	5	6	7
2	I want the opportunity to give back to my community	1	2	3	4	5	6	7
3	I'm the type of person who lends a helping hand whenever possible	1	2	3	4	5	6	7
4	I consider myself a team player	1	2	3	4	5	6	7
5	My major mission in life is striving for social justice for all	1	2	3	4	5	6	7
6	My heart reaches out to those who are less fortunate than myself	1	2	3	4	5	6	7
7	If another person can learn from my mistakes, I'm willing to share my ups and downs with that person so that he/she can do better	1	2	3	4	5	6	7
8	It feels great to know that others can count on me	1	2	3	4	5	6	7
9	I have an important role to play in bringing together the peoples of the world	1	2	3	4	5	6	7
10	I believe in the motto, "United We Stand, Divided We Fall."	1	2	3	4	5	6	7

## **Section 4**

Please circle the number that best fits the answer to the following statements. Only circle one number.

1. If I want to, I can achieve a higher GPA this semester.

Strongly						Strongly
Disagree						Agree
1	2	3	4	5	6	7

2. It is mostly up to me whether I achieve a higher GPA this semester.

Strongly						Strongly
Disagree						Agree
1	2	3	4	5	6	7

3. For me, achieving a higher GPA this semester would be:

Impossible						Possible
1	2	3	4	5	6	7

4. How much control do you believe you have over achieving a higher GPA this semester?

No Control						Complete
						Control
1	2	3	4	5	6	7

**Section 5** 

Please use the following scale to respond to each statement. Circle the number that best describes how much you *agree* or *disagree* with each statement. Only circle one number.

Very Strongly Disagree	Strongly Disagree	Disagree	Agree	Strongly Agree	Very Strongly Agree
1	2	3	4	5	6

1	I am confident that I can achieve a high GPA this year (3.0 or above)	1	2	3	4	5	6
2	Achieving a high level of performance in my sport is an important goal for me this year	1	2	3	4	5	6
3	It is important for me to learn what is taught in my courses	1	2	3	4	5	6
4	I am willing to put in the time to earn excellent grades in my courses	1	2	3	4	5	6
5	The most important reason why I am in school is to play my sport	1	2	3	4	5	6
6	The amount of work required in my courses interferes with my athletic goals	1	2	3	4	5	6
7	I will be able to use what is taught in my courses in different aspects of my life outside of school	1	2	3	4	5	6
8	I chose to play my sport because it is something that I am interested in as a career	1	2	3	4	5	6
9	I have some doubt about my ability to be a star athlete on my team	1	2	3	4	5	6
10	I chose (or will choose) my major because it is something that I am interested as a career	1	2	3	4	5	6
11	Earning a high GPA (3.0 or above) is not an important goal for me this year	1	2	3	4	5	6
12	It is important to me to learn the skills and strategies taught by my coaches	1	2	3	4	5	6
13	It is important for me to do better than other athletes in my sport	1	2	3	4	5	6
14	The time I spend engaged in my sport is enjoyable to me	1	2	3	4	5	6
15	It is worth the effort to be an exceptional athlete in my sport	1	2	3	4	5	6

16	Participation in my sport interferes with my progress toward earning a college degree	1	2	3	4	5	6
17	I get more satisfaction from earning an "A" in a course toward my major than winning a game in my sport	1	2	3	4	5	6
18	During the years I compete in my sport, completing a college degree is not a goal for me	1	2	3	4	5	6
19	I am confident that I can be a star performer on my team this year	1	2	3	4	5	6
20	My goal is to make it to the professional level or the Olympics in my sport	1	2	3	4	5	6
21	I have some doubt about my ability to earn high grades in some of my courses	1	2	3	4	5	6
22	I am confident that I can make it to the elite level in my sport (Professional/Olympic)	1	2	3	4	5	6
23	I am confident that I can earn a college degree	1	2	3	4	5	6
24	I will be able to use the skills I learn in my sport in other areas of my life outside of sports	1	2	3	4	5	6
25	I get more satisfaction from winning a game in my sport than from getting an "A" in a course toward my major	1	2	3	4	5	6
26	It is not important for me to perform better than other students in my courses	1	2	3	4	5	6
27	I am willing to put in the time to be outstanding in my sport	1	2	3	4	5	6
28	The content of most of my courses is interesting to me	1	2	3	4	5	6
29	The most important reason why I am in school is to earn a degree	1	2	3	4	5	6
30	It is not worth the effort to earn excellent grades in my courses	1	2	3	4	5	6



# **Section 6**

1.	How old are you (years):
2.	What position do you play:
3.	Class Standing (Please Check One):  ☐ Freshman  ☐ Sophomore  ☐ Junior  ☐ Senior  ☐ Senior +
4.	Please indicate your major:
5.	What city and country were you born in:
6.	If you were <b>born outside of Mainland USA</b> (e.g. Hawaii, Samoa, American Samoan etc.), at what age(s) did you live on Mainland USA?  Age to age Age to age Age to age
7.	Please indicate your ethnicity (Choose all that apply):  Samoan  Tongan  Fijian  Hawaiian  Maori  Other (Please specify all):
8.	How many children in your family (including you)?
9.	Are you the oldest child? Yes No



10. Are you the youngest child? Yes No

11. WI	nich one of the following categories does your family fit under? (Please check only one)
	Upper class
	Upper-middle class
	Middle class
	Lower-middle class
	Lower class
	Poverty
12. WI	nat is your mother's ethnicity:
13. WI	nat is your mother's highest level of education:
	Less than high school
	High school graduate
	Some college
	College graduate
	Post college/Graduate school
14. WI	nat is your father's ethnicity:
15. Wl	nat is your father's highest level of education:
	Less than high school
	High school graduate
	Some college
	College graduate
	Post college/Graduate school
your cumula involved in	completion of this survey implies your consent to participate and certifies that you agree to disclose tive GPA at the end of the fall 2013 semester. You give your consent only to authorized researchers this study who will use it strictly for academic research purposes. These records are protected by the cational Rights and Privacy Act of 1974 and they may not be disclosed with your consent.
School Stud	ent Identification Number (student ID):

Thank you for completing the questionnaire!



# APPENDIX. The SAMSAQ Items

- 1. I am confident that I can achieve a high grade point average this year (3.0 or above).
- 2. Achieving a high level of performance in my sport is an important goal for me this year.
- 3. It is important for me to learn what is taught in my courses.
- I am willing to put in the time to earn excellent grades in my courses.
- 5. The most important reason why I am in school is to play my sport.
- The amount of work required in my courses interferes with my athletic goals.
- I will be able to use what is taught in my courses in different aspects of my life outside of school.
- 8. I chose to play my sport because it is something that I am interested in as a career.
- 9. I have some doubt about my ability to be a star athlete on my team.
- 10. I chose (or will choose) my major because it is something I am interested in as a career.
- 11. Earning a high grade point average (3.0 or above) is not an important goal for me this year.
- It is important to me to learn the skills and strategies taught by my coaches.
- 13. It is important for me to do better than other athletes in my sport.
- 14. The time I spend engaged in my sport is enjoyable to me.
- 15. It is worth the effort to be an exceptional athlete in my sport.
- 16. Participation in my sport interferes with my progress towards earning a college degree.
- I get more satisfaction from earning an "A" in a course toward my major than winning a game in my sport.
- During the years I compete in my sport, completing a college degree is not a goal for me.
- I am confident that I can be a star performer on my team this year.
- 20. My goal is to make it to the professional level or the Olympics in my sport.
- 21. I have some doubt about my ability to earn high grades in some of my courses.
- 22. I am confident that I can make it to an elite level in my sport (Professional/Olympics).
- I am confident that I can earn a college degree.
- 24. I will be able to use the skills I learn in my sport in other areas of my life outside of sports.
- 25. I get more satisfaction from winning a game in my sport than from getting an "A" in a course toward my major.
- 26. It is not important for me to perform better than other students in my courses.
- 27. I am willing to put in the time to be outstanding in my sport.
- 28. The content of most of my courses is interesting to me.
- 29. The most important reason why I am in school is to earn a degree.
- 30. It is not worth the effort to earn excellent grades in my courses.

Note. Copyright 2002 by Joy L. Gaston: May be used for research with permission. Each item is rated on a scale of 1 to 6 with 1 = very strongly disagree, 2 = strongly disagree, 3 = disagree, 4 = agree, 5 = strongly agree, and 6 = very strongly agree. The CAM subscale consists of items 8, 9, 19, 20, and 22. The SAM subscale consisted of items 2, 12, 13, 14, 15, 17, 25, and 27. The AM subscale items consisted of items 1, 3, 4, 5(reversed), 7, 10, 11, 17, 18, 21, 23, 25(reversed), 26, 28, 29, and 30.

## Appendix A-3: Revised (12-item) MEIM

# Revised (12-Item) Multigroup Ethnic Identity Measure MEIM

#### Items

In this country, people come from a lot of different cultures and there are many different words to describe the different backgrounds or ethnic groups that people come from. Some examples of the names of ethnic groups are Hispanic, Black, Asian-American, Native American, Irish-American, and White. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

Please fill in: In terms of ethnic group, I consider myself to be \_\_\_\_\_\_

Use the numbers below to indicate how much you agree or disagree with each statement.

(4) Strongly agree; (3) Agree; (2) Disagree; (1) Strongly disagree

- 1. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.
- 2. I am active in organizations or social groups that include mostly members of my own ethnic group.
- 3. I have a clear sense of my ethnic background and what it means for me.
- 4. I think a lot about how my life will be affected by my ethnic group membership.
- 5. I am happy that I am a member of the group I belong to.
- 6. I have a strong sense of belonging to my own ethnic group.
- 7. I understand pretty well what my ethnic group membership means to me.
- 8. To learn more about my ethnic background, I have often talked to other people about my ethnic group.
- 9. I have a lot of pride in my ethnic group and its accomplishments.
- 10. I participate in cultural practices of my own group, such as special food, music, or customs.
- 11. I feel a strong attachment towards my own ethnic group.
- 12. I feel good about my cultural or ethnic background.

### Procedures and scoring:

- 1. The measures should also include an appropriate list from which participants can select a self-label for themselves and each parent.
- 2. The affirmation/belonging subscale includes items 3, 5, 6, 7, 9, 11, and 12. The exploration subscale includes items 1, 2, 4, 8, and 10. (Item 3 loads on both subscales.)



# Appendix A-4: Future Support and Respect for Family Measures

# PsycTESTS°

doi: 10.1037/t16315-000

#### **Future Support Measure**

#### Items

- 1. Help your parents financially in the future
- 2. Live at home with your parents until you are married
- 3. Help take care of your brothers and sisters in the future
- 4. Spend time with your parents even after you no longer live with them
- 5. Live or go to college near your parents
- 6. Have your parents live with you when you get older

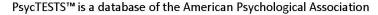


doi: 10.1037/t16314-000

### **Respect for Family Measure**

#### Items

- 1. Treat your parents with great respect
- 2. Follow your parents' advice about choosing friends
- 3. Do well for the sake of your family
- 4. Follow your parents' advice about choosing a job or major in college
- 5. Treat your grandparents with great respect
- 6. Respect your older brothers and sisters
- 7. Make sacrifices for your family





## Appendix A-5: Cultural Values Orientation Scale

#### Individualism

- 1. I'm not to blame for others' misfortunes.
- 2. I feel that I'm the master of my own fate.
- 3. I really feel that the "pull-yourself-up-by-your-bootstraps" philosophy makes a lot of sense.
- 4. These days, the only person you can depend upon is yourself.
- 5. I take great pride in accomplishing what no one else can accomplish.
- 6. I actively resist other people's efforts to mold me.
- 7. Before I can feel comfortable with anybody else, I must feel comfortable with myself.
- 8. I place personal freedom above all other values.
- 9. I know myself better than anyone else possibly could know me.
- 10. I see nothing wrong with self-promotion.

#### Collectivism

- 1. I don't feel that I'm a success unless I've helped others succeed as well.
- 2. I want the opportunity to give back to my community.
- 3. I'm the type of person who lends a helping hand whenever possible.
- 4. I consider myself a team player.
- 5. My major mission in life is striving for social justice for all.
- 6. My heart reaches out to those who are less fortunate than myself.
- 7. If another person can learn from my mistakes, I'm willing to share my ups and downs with that person so that he or she can do better.
- 8. It feels great to know that others can count on me.
- 9. I have an important role to play in bringing together the peoples of the world.
- 10. I believe in the motto, "United We Stand, Divided We Fall."

## Familism

- 1. When it comes to social responsibility, blood really is thicker than water.
- 2. My family always is there for me in times of need.
- 3. I owe it to my parents to do well in life.
- 4. I know that my family has my best interests in mind.
- 5. I cherish the time that I spend with my relatives.
- 6. I will do all that I can to keep alive the traditions passed on to me by my parents and grandparents.



## **Cultural Value Orientation Scales**

#### Items

- 7. Even when I'm far away from home, my family ties keep me feeling safe and secure.
- 8. To this day, my parents' teachings serve as my best guide to behavior.
- 9. In my opinion, the family is the most important social institution of all.
- 10. I cannot imagine what I would do without my family.



# Consent to be a Research Participant

## **Introduction**

This study is being conducted by Sierra Keung, a Master's graduate student at Brigham Young University to determine the factors which may motivate academic performance among Polynesian student-athletes who participate in Division I college football. You were invited to participate because of you fit the criteria of this study.

## **Procedures**

If you agree to participate in this research study, the following will occur:

- you will complete a one-time online questionnaire about the factors which motivate academic performance
- the questionnaire will be completed during the Fall 2013 semester
- total time commitment will be 15-20 minutes

## Risks/Discomforts

Minimal risks are involved. You will be asked to self-evaluate your cultural beliefs, values, and attitude toward academic performance. If this process causes you discomfort, however, you will be able to discuss the issue with the researcher or a professional counselor.

### **Benefits**

There will be no direct benefits to you. It is hoped, however, that through your participation researchers may learn about the factors which influence academic performance among Polynesian student-athletes. The findings will assist academic advisors and administrators to more effectively guide Polynesian student-athletes to be successful on the field/court, and in the classroom.

## Confidentiality

The research data will be kept on a password protected computer in a password word secured office. Only the researcher will have access to the data. At the conclusion of the study, all identifying information will be removed and the data will be kept in the researcher's locked office on the password protected computer.

### **Participation**

Participation in this research study is voluntary. You have the right to withdraw at any time or refuse to participate entirely without jeopardy to your class status, grade, or standing with the university.

# **Questions about the Research**

If you have questions regarding this study, you may contact [researcher's name] at [contact information] for further information.

## **Questions about Your Rights as Research Participants**

If you have questions regarding your rights as a research participant contact IRB Administrator at (801) 422-1461; A-285 ASB, Brigham Young University, Provo, UT 84602; irb@byu.edu.



# **Access to Educational Records**

By signing this form, you certify that you agree to disclose your cumulative GPA at the end of the fall 2013 semester. You give your consent only to authorized researchers involved in this study who will use it strictly for academic research purposes. These records are protected by the Family Educational Rights and Privacy Act of 1974 and they may not be disclosed with your consent.

<b>Statement of Consent</b> I have read, understood, and recthis study.	eived a copy of the above consent and desir	re of my own free will to participate in
Name (Printed):	Sionature	Date:

## Appendix A-7: Implied Consent Form

# Implied Consent

My name is Sierra Keung, I am a graduate student at Brigham Young University and I am conducting this research under the supervision of Dr. Peter Ward, from the Department of Recreation Management and Youth Leadership. You are being invited to participate in this research study of Examining Academic Performance of Polynesian Student-Athletes using the Theory of Planned Behavior. I am interested in examining the cultural influences toward motivating academic performance among Polynesian student-athletes who participate in Division one college football.

Your participation in this study will require the completion of the attached questionnaire. This should take approximately 15-20 minutes of your time. Your participation will be anonymous and you will not be contacted again in the future. You will not be paid for being in this study. This survey involves minimal risk to you. The benefits, however, may impact society by helping increase knowledge about advising Polynesian student-athletes to effectively balance their time and effort between being a student, and athlete successfully.

You do not have to be in this study if you do not want to be. You do not have to answer any question that you do not want to answer for any reason. We will be happy to answer any questions you have about this study. If you have further questions about this project or if you have a research-related problem you may contact me, Sierra Keung at sierrakeung@byu.edu or my advisor, Dr. Peter Ward at peter ward@byu.edu.

If you have any questions about your rights as a research participant you may contact the IRB Administrator at A-285 ASB, Brigham Young University, Provo, UT 84602; irb@byu.edu; (801) 422-1461. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

The completion of this survey implies your consent to participate and certifies that you agree to disclose your cumulative GPA at the end of the fall 2013 semester. You give your consent only to authorized researchers involved in this study who will use it strictly for academic research purposes. These records are protected by the Family Educational Rights and Privacy Act of 1974 and they may not be disclosed with your consent.

## **Statement of Consent**

I have read, understood, and received a copy of the above consent and desire of my own free will to participate in this study.

Please complete the attached questionnaire. Thank you!

